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MONTHLY WEATHER REVIEW

MAY 1945

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MONTHLY WEATHER REVIEW

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VOL. 73, No. 5
W. B. No. 1441

MAY 1945

CLOSED JULY 5, 1945
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METEOROLOGICAL AND CLIMATOLOGICAL DATA FOR MAY 1945

AEROLOGICAL OBSERVATIONS

TABLE 1.—Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during May 1945

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Albany, N. Y. (86 m.)			Albuquerque, N. Mex. (1,620 m.)			Apalachicola, Fla. (5 m.)			Atlanta, Ga. (300 m.)			Big Spring, Tex. (774 m.)			Bismarck, N. Dak. (505 m.)			Boise, Idaho (808 m.)										
	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity									
Surface	31	1,001	10.8	78	31	834	20.7	19	31	1,015	21.3	82	31	961	17.7	71	31	923	23.8	37	30	956	9.3	59	31	912	15.0	58	
500	31	953	9.3	74	—	—	—	—	31	960	20.4	64	31	958	18.4	62	—	—	—	—	30	900	8.1	54	31	898	15.2	51	
1,000	31	897	6.6	75	—	—	—	—	31	905	17.6	57	31	904	16.0	59	31	899	22.7	26	30	900	8.1	54	31	898	15.2	51	
1,500	31	844	4.4	74	—	—	—	—	31	854	15.1	49	31	852	13.0	58	31	849	20.0	35	30	847	4.8	58	31	846	12.3	46	
2,000	31	793	1.3	75	31	797	18.9	20	31	804	12.1	46	31	802	10.4	47	31	801	17.2	30	30	796	1.5	61	31	796	8.3	49	
2,500	31	745	-1.9	72	31	752	15.3	21	31	757	9.2	43	31	756	7.6	42	31	755	14.1	27	30	748	-1.5	61	31	750	4.2	54	
3,000	31	699	-4.6	67	31	708	11.0	24	31	712	6.3	40	31	710	4.6	38	31	711	10.7	28	30	702	-4.2	63	31	704	0.2	58	
4,000	31	615	-9.2	55	31	627	1.8	35	30	630	0.3	33	30	628	-1.6	36	31	630	2.6	33	30	618	-9.8	61	31	621	-6.9	63	
5,000	31	540	-15.3	53	31	552	-7.1	53	29	556	-6.3	39	29	552	-8.8	40	30	555	-5.5	39	30	542	-15.9	50	30	546	-13.4	62	
6,000	31	472	-22.0	—	30	485	-15.4	58	29	488	-12.8	—	29	485	-15.6	41	30	488	-13.1	43	30	474	-22.7	—	30	478	-20.6	57	
7,000	31	411	-29.4	—	29	424	-22.5	—	29	427	-19.4	—	29	424	-22.4	—	30	427	-19.9	—	30	413	-30.0	—	30	417	-28.2	—	
8,000	31	357	-36.4	—	29	370	-29.3	—	29	373	-26.0	—	29	369	-29.7	—	29	373	-27.3	—	30	358	-37.6	—	30	361	-36.0	—	
9,000	31	308	-43.2	—	29	320	-38.8	—	28	324	-34.0	—	28	320	-37.1	—	29	323	-34.8	—	29	308	-45.0	—	30	312	-43.7	—	
10,000	31	265	-49.2	—	28	277	-44.3	—	28	280	-42.1	—	28	276	-44.2	—	29	280	-42.2	—	28	265	-51.3	—	28	269	-50.3	—	
11,000	31	228	-53.3	—	28	238	-51.2	—	28	241	-49.8	—	27	237	-51.4	—	29	241	-49.6	—	26	227	-54.9	—	26	231	-55.4	—	
12,000	27	195	-55.2	—	28	203	-57.4	—	27	207	-56.3	—	25	202	-57.3	—	29	206	-56.2	—	22	194	-53.8	—	25	196	-56.7	—	
13,000	26	166	-56.6	—	22	173	-59.3	—	25	176	-58.8	—	25	173	-58.8	—	26	176	-60.4	—	18	166	-53.4	—	21	167	-56.2	—	
14,000	17	141	-56.3	—	19	147	-60.1	—	22	150	-62.1	—	19	147	-59.9	—	19	150	-62.0	—	15	142	-52.9	—	14	143	-55.5	—	
15,000	15	121	-56.4	—	14	126	-61.6	—	17	128	-64.3	—	15	125	-60.8	—	12	128	-64.5	—	10	122	-54.3	—	10	122	-56.0	—	
16,000	11	104	-57.5	—	10	107	-64.2	—	12	108	-66.8	—	10	106	-61.9	—	7	108	-67.6	—	8	105	-55.6	—	6	104	-57.6	—	
17,000	7	89	-57.4	—	5	88	-55.3	—	6	92	-67.5	—	6	90	-63.2	—	—	—	—	—	7	91	-62.3	—	—	—	—	—	—
	Brownsville, Tex. (6 m.)			Buffalo, N. Y. (221 m.)			Caribou, Maine (193 m.)			Charleston, S. C. (14 m.)			Denver, Colo. (1,616 m.)			Dodge City, Kans. (787 m.)			El Paso, Tex. (1,195 m.)										
Surface	31	1,012	24.1	81	30	986	8.9	82	31	990	7.7	79	30	1,014	17.9	86	22	835	13.5	52	31	921	15.3	66	31	878	25.9	15	
500	31	956	21.4	76	30	953	8.3	75	31	953	6.8	72	30	958	19.3	61	—	—	—	—	31	898	15.9	58	—	—	—	—	—
1,000	31	903	21.0	46	30	897	6.1	74	31	897	4.2	72	30	904	16.1	57	—	—	—	—	31	847	14.2	53	31	848	24.7	18	
1,500	31	852	19.4	34	30	844	3.4	75	31	843	1.3	72	30	852	13.2	55	—	—	—	—	31	847	14.2	53	31	848	24.7	18	
2,000	31	803	17.2	30	30	793	0.6	73	31	792	-1.7	76	30	803	10.2	53	22	797	12.4	47	31	798	12.0	50	31	800	20.8	16	
2,500	31	758	14.3	30	30	745	-2.3	73	30	744	-4.7	72	30	756	7.3	50	22	751	9.3	49	31	752	9.4	43	31	755	16.7	18	
3,000	31	713	11.0	30	30	699	-4.6	63	30	698	-6.8	69	30	711	4.4	48	22	707	5.7	51	31	707	6.4	39	31	711	12.2	21	
4,000	31	632	4.2	32	29	615	-10.3	63	30	613	-12.2	65	30	628	-1.8	47	22	624	-1.6	59	31	625	-0.5	40	31	630	3.5	28	
5,000	30	558	-3.1	36	29	539	-15.8	59	30	537	-17.9	53	30	553	-8.1	41	22	550	-9.1	50	31	551	-7.9	49	31	556	-4.7	40	
6,000	27	491	-9.9	—	26	472	-22.1	—	30	469	-24.4	—	30	463	-14.8	38	20	482	-16.3	31	484	-14.9	49	30	489	-12.1	30		
7,000	27	430	-17.0	—	26	411	-29.5	—	30	408	-31.5	—	30	425	-21.5	—	20	422	-23.5	—	31	423	-21.9	—	29	428	-19.3	—	
8,000	27	376	-24.6	—	25	356	-36.8	—	29	353	-39.1	—	28	371	-28.4	—	20	367	-31.1	—	31	368	-29.6	—	28	374	-26.7	—	
9,000	27	327	-32.4	—	23	307	-43.6	—	29	305	-45.7	—	28	322	-35.4	—	20	318	-39.1	—	30	319	-37.2	—	27	324	-34.1	—	
10,000	27	283	-39.9	—	23	264	-48.7	—	27	261	-51.1	—	24	278	-43.5	—	20	274	-47.2	—	25	276	-45.0	—	27	281	-41.7	—	
11,000	25	244	-47.1	—	21	227	-52.6	—	22	224	-52.8	—	23	240	-51.0	—	19	226	-54.4	—	26	237	-51.9	—	26	241	-49.3	—	
12,000	23	209	-54.4	—	21	194	-55.1	—	20	192	-53.0	—	22	205	-57.0	—	14	201	-59.8	—	20	202	-57.6	—	24	207	-55.4	—	
13,000	21	179	-60.3	—	15	164	-53.2	—	15	164	-52.7	—	21	175	-60.0	—	10	171	-61.0	—	25	172	-60.4	—	21	177	-59.6	—	
14,000	16	152	-64.4	—	12	140	-52.9	—	12	140	-53.5	—	19	149	-62.2	—	6	146	-60.9	—</td									

TABLE 1.—Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during May 1945—Continued

Altitude (meters) m. s. l.	Huntington, W. Va. (172 m.)			International Falls, (343 m.)			Jackson, Miss. (97 m.)			Joliet, Ill. (178 m.)			Lake Charles, La. (5 m.)			Little Rock, Ark. (79 m.)			Louisville, Ky. (165 m.)									
	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity				
Surface	31	994	13.3	81	31	974	7.2	63	31	1,003	19.3	76	31	992	10.6	79	31	1,014	21.0	85	30	1,004	18.9	75	31	994	15.1	75
500	31	956	14.1	69	31	955	7.2	58	31	957	19.3	66	31	954	10.8	68	31	958	19.1	76	30	957	18.1	65	31	955	14.7	67
1,000	31	901	11.0	70	31	899	3.9	60	31	903	16.4	64	31	898	8.4	69	31	904	17.4	55	30	902	15.1	62	31	900	11.7	67
1,500	31	848	7.8	70	31	845	0.4	65	31	851	14.7	53	31	845	5.9	60	31	853	15.9	44	30	850	13.1	54	31	848	8.6	67
2,000	31	798	5.0	70	31	793	-2.9	68	31	802	12.7	42	31	795	3.5	63	31	804	14.0	35	30	801	11.0	49	31	797	6.0	65
2,500	31	750	2.5	63	31	744	-5.5	64	31	756	9.8	42	31	748	1.0	61	31	758	11.5	52	30	754	8.6	40	31	750	3.7	60
3,000	31	705	-0.1	58	31	698	-7.9	51	31	711	6.8	40	31	702	-1.6	58	31	713	8.4	33	30	709	5.7	37	31	705	1.0	60
4,000	30	622	-5.8	56	30	613	-13.2	51	31	629	0.1	40	30	618	-7.2	59	31	631	1.3	37	30	627	-0.8	36	31	622	-4.9	56
5,000	29	547	-11.7	55	29	537	-19.2	51	31	554	-6.9	45	30	543	-12.9	55	30	556	-5.4	36	30	553	-1.6	41	31	547	-11.2	53
6,000	29	479	-18.2	49	29	469	-25.5	—	31	487	-13.7	—	30	476	-19.8	50	30	489	-12.1	—	29	485	-15.6	44	30	479	-18.1	53
7,000	29	418	-25.4	—	27	408	-32.6	—	31	426	-20.3	—	30	415	-27.2	—	30	429	-19.2	—	29	424	-22.8	—	30	419	-25.1	—
8,000	29	364	-32.8	—	27	352	-39.9	—	31	372	-27.4	—	30	360	-34.7	—	30	374	-26.7	—	28	369	-30.1	—	30	364	-32.3	—
9,000	29	315	-39.8	—	27	304	-46.3	—	31	322	-35.2	—	30	311	-42.0	—	29	324	-34.6	—	28	320	-37.5	—	29	315	-39.7	—
10,000	29	271	-46.6	—	27	261	-51.1	—	31	279	-42.9	—	28	268	-48.1	—	28	281	-42.2	—	28	276	-44.8	—	28	272	-46.1	—
11,000	29	233	-52.8	—	27	224	-53.6	—	30	240	-50.4	—	26	230	-53.2	—	26	242	-49.8	—	28	237	-51.8	—	27	234	-52.5	—
12,000	28	199	-56.8	—	27	191	-53.1	—	29	205	-56.7	—	24	196	-56.6	—	24	207	-56.3	—	28	203	-57.6	—	22	200	-57.8	—
13,000	22	170	-59.1	—	24	164	-61.7	—	29	175	-60.7	—	20	168	-57.6	—	24	177	-61.2	—	25	173	-60.6	—	20	170	-59.4	—
14,000	14	144	-67.9	—	20	140	-61.6	—	22	149	-62.0	—	19	144	-58.0	—	19	150	-64.5	—	21	147	-60.9	—	14	146	-60.0	—
15,000	11	123	-68.8	—	14	120	-62.0	—	18	127	-63.9	—	13	123	-59.2	—	11	128	-66.2	—	13	125	-62.3	—	10	124	-61.0	—
16,000	6	106	-59.3	—	10	103	-52.6	—	8	107	-59.6	—	12	105	-59.8	—	9	106	-64.0	—	10	106	-64.0	—	—	—	—	—
17,000	—	—	—	—	6	91	-67.3	—	—	—	—	—	7	90	-62.1	—	—	—	—	—	—	—	—	—	—	—	—	—
	Mazatlan, Mexico (80 m.)			Medford, Oreg. (409 m.)			Merida, Mexico (27 m.)			Miami, Fla. (4 m.)			Nashville, Tenn. (180 m.)			North Platte, Nebr. (849 m.)			Oakland, Calif. (2 m.)									
Surface	28	1,003	24.3	80	31	966	16.3	61	31	1,009	27.6	63	31	1,016	23.0	75	31	993	17.2	76	29	916	12.1	66	31	1,016	13.8	76
500	28	956	24.2	46	31	957	15.9	60	31	957	24.8	60	31	960	20.9	74	31	956	16.3	69	29	—	—	—	31	958	10.4	74
1,000	28	903	24.0	35	31	902	12.7	62	30	904	22.4	55	31	906	17.9	70	31	902	13.4	69	29	899	12.1	60	31	902	10.3	56
1,500	28	853	21.2	38	31	849	9.1	67	30	853	19.4	57	31	855	15.3	64	31	850	10.4	68	29	847	10.1	55	31	849	9.2	46
2,000	28	804	18.3	35	31	799	5.5	72	30	804	15.9	58	31	805	12.8	53	31	800	8.0	59	29	797	7.9	56	31	799	6.8	41
2,500	28	759	15.4	34	31	752	2.1	72	30	758	12.3	58	31	759	10.2	45	31	753	5.6	58	29	750	5.7	56	31	752	3.8	39
3,000	28	715	12.2	26	31	705	-1.0	68	30	714	9.4	47	31	714	7.5	44	31	708	2.9	56	29	705	2.8	54	31	706	0.7	41
4,000	25	633	12.4	32	30	622	-7.3	60	30	632	3.9	30	28	552	-3.0	51	29	623	-3.6	54	31	623	-6.2	46	—	—	—	—
5,000	25	560	-2.1	—	30	546	-14.1	55	25	559	-1.9	28	31	557	-4.3	33	28	550	-9.7	50	29	548	-10.5	59	31	547	-13.0	54
6,000	25	492	-9.3	—	30	478	-21.2	—	25	492	-8.2	—	31	490	-10.5	—	28	482	-16.3	48	29	480	-17.6	59	31	480	-19.9	47
7,000	23	432	-16.8	—	28	417	-28.8	—	25	432	-15.1	—	31	430	-17.2	—	28	422	-23.5	—	29	420	-24.5	—	31	418	-27.0	—
8,000	21	377	-24.3	—	25	361	-37.2	—	25	377	-21.8	—	28	375	-24.6	—	28	367	-30.9	—	29	365	-31.8	—	30	363	-34.4	—
9,000	21	328	-32.1	—	24	312	-44.0	—	25	328	-29.3	—	31	326	-32.1	—	28	318	-38.1	—	29	316	-39.5	—	30	314	-41.7	—
10,000	20	285	-39.8	—	24	268	-49.5	—	25	285	-37.2	—	31	283	-39.7	—	26	274	-45.4	—	29	272	-47.2	—	30	270	-47.7	—
11,000	18	245	-47.7	—	23	230	-53.4	—	25	246	-45.1	—	31	244	-47.3	—	26	236	-51.9	—	26	233	-54.8	—	30	232	-52.0	—
12,000	15	210	-55.3	—	22	196	-55.7	—	23	211	-52.6	—	31	209	-54.6	—	23	202	-57.2	—	23	199	-59.0	—	28	199	-55.2	—
13,000	8	178	-61.0	—	18	167	-56.0	—	18	181	-59.2	—	26	178	-60.2	—	22	173	-59.7	—	19	170	-60.6	—	25	169	-56.6	—
14,000	—	—	—	—	16	143	-54.9	—	—	—	—	—	13	129	-67.1	—	14	147	-60.5	—	12	125	-60.7	—	10	123	-60.0	—
15,000	6	105	-54.3	—	14	107	-55.4	—	7	105	-59.6	—	6	108														

MAY 1945

MONTHLY WEATHER REVIEW

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TABLE 1.—Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent, obtained by radiosondes during May 1945—Continued

Altitude (meters) m. s. l.	St. Louis, Mo. (171 m.)				St. Paul, Minn. (225 m.)				San Antonio, Tex. (240 m.)				San Juan, P. R. (15 m.)				Santa Maria, Calif. (71 m.)				Sault Ste. Marie, Mich. (221 m.)				Spokane, Wash. (598 m.)						
	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity	Number of ob- servations	Pressure	Temperature	Relative humidity			
Surface	30	994	14.6	76	31	987	11.0	50	31	985	22.8	69	31	1,013	24.6	82	31	1,008	12.3	85	31	987	5.5	79	31	942	15.5	58			
500	30	956	13.8	68	31	955	10.1	55	31	956	22.1	66	31	959	21.6	83	31	958	10.5	83	31	954	6.3	65	31	890	13.7	49			
1,000	30	902	11.2	67	31	899	6.9	59	31	902	19.5	60	31	905	18.6	80	31	902	10.8	61	31	897	3.7	61	31	846	9.6	54			
1,500	30	848	9.0	65	31	845	3.7	62	31	851	17.9	45	31	853	15.9	77	31	850	10.7	46	31	843	1.0	60	31	846	7.9	61			
2,000	30	798	6.9	62	31	794	0.4	61	31	802	16.2	33	31	804	13.3	71	31	800	7.9	43	31	792	-1.8	59	31	796	5.3	61			
2,500	30	751	4.7	55	31	746	-2.2	52	31	757	13.7	26	31	758	10.8	64	31	752	5.0	39	31	744	-4.0	66	31	749	1.1	66			
3,000	30	706	2.0	56	31	700	-4.7	53	31	712	10.5	29	31	713	8.3	56	31	707	1.7	41	31	697	-7.1	54	31	703	-2.6	68			
4,000	30	623	-3.9	51	29	616	-10.1	52	31	631	3.5	30	31	632	3.3	48	31	624	-4.6	40	31	613	-12.1	50	31	619	-8.6	64			
5,000	30	548	-10.6	47	29	541	-10.0	45	31	557	-4.0	30	28	558	-1.9	37	31	549	-11.5	44	31	537	-17.9	48	31	543	-15.0	54			
6,000	30	480	-17.3	35	29	473	-22.5	30	30	490	-10.9	27	27	491	-8.0	39	30	481	-18.1	31	31	470	-24.3	33	31	475	-22.0	54			
7,000	30	420	-24.7	29	412	-29.8	30	30	430	-17.7	27	432	-14.7	46	30	420	-25.1	31	31	408	-31.3	33	31	414	-29.7	54					
8,000	29	365	-31.8	29	357	-37.2	30	30	375	-25.1	25	377	-21.5	30	365	-32.6	31	31	354	-38.5	33	31	359	-37.1	54						
9,000	28	316	-39.3	29	308	-44.0	30	30	326	-32.7	24	329	-29.0	30	316	-40.1	31	31	305	-45.4	28	310	-44.9	54	31						
10,000	28	273	-46.3	29	265	-50.2	29	29	282	-40.4	24	285	-36.7	28	272	-47.3	31	31	262	-50.9	28	266	-51.4	54	31						
11,000	26	234	-52.7	29	227	-54.5	29	243	-48.0	24	246	-44.6	27	234	-53.6	29	225	-53.5	27	228	-54.3	27	220	-54.3	54	31					
12,000	24	200	-58.0	27	194	-58.8	29	208	-54.7	24	212	-52.2	25	200	-58.2	28	192	-52.9	22	195	-55.5	22	190	-55.5	54	31					
13,000	17	171	-60.2	25	166	-55.8	27	177	-60.0	23	181	-59.8	25	170	-59.4	24	164	-52.4	20	166	-55.4	20	160	-55.4	54	31					
14,000	13	145	-59.2	21	141	-55.1	21	152	-63.5	18	153	-66.4	23	145	-59.3	20	140	-52.4	13	141	-52.9	13	135	-52.9	54	31					
15,000	12	124	-60.6	19	121	-55.6	12	129	-65.6	15	130	-71.7	20	123	-60.0	16	120	-52.3	11	121	-53.5	11	115	-53.5	54	31					
16,000	5	105	-59.8	14	103	-57.2	7	110	-68.5	7	109	-74.4	17	105	-61.5	8	103	-53.3	5	104	-53.9	5	98	-53.9	54	31					
17,000				11	88	-57.5							12	90	-62.0				5	76	-61.3				5	89	-53.8				
18,000				8	75	-57.6							6	76	-61.3				5	65	-62.2				5	89	-53.8				
19,000													5	75	-54.3																

¹ Data not received.

NOTE.—All observations scheduled between 10 p. m. and midnight, E. S. T. (0300 and 0600 G. C. T.), except at Mazatlan and Merida, where they are taken near 9 p. m., E. S. T. (0200 G. C. T.).

"Number of observations" refers to pressure only. (In a few cases temperature or humidity data may be missing for one or more levels of some observations.) Relative humidity data are not published for levels having a corresponding mean temperature below -20° C.

All relative humidity observations are obtained by electric hygrometer and have been adjusted to compensate for the values occurring below the operating range of the humidity element. For explanation of the adjustment see article entitled "Curve Method for Obtaining Monthly Means of Relative Humidity," page 241, MONTHLY WEATHER REVIEW, December 1944.

None of the means included in these tables are based on less than 15 surface or 5 standard level observations.

Data for Havana, Cuba, and Swan Island, West Indies, will appear in a later issue.

Altitude (meters) m. s. l.	Swan Island, W. I. (10 m.)				Tlacubaya, Mexico (2,306 m.)				Tampa, Fla. (3 m.)				Tatoosh Island, Wash. (31 m.)				Toledo, Ohio (191 m.)				Washington, D. C. (25 m.)				
Surface	31	774	17.1	54	31	1,016	22.8	73	31	1,011	10.6	88	28	969	10.8	78	31	1,014	15.9	68	31	955	14.0	59	31
500					31	960	20.5	64	31	956	9.3	77	28	953	10.8	70	31	950	10.7	60	31	900	10.7	60	31
1,000					31	906	17.9	56	31	900	8.3	66	28	898	8.9	68	31	847	7.6	61	31				
1,500					31	854	14.9	53	31	846	6.2	51	28	845	6.0	70	31	797	4.3	60	31				
2,000					31	805	11.9	51	31	796	3.2	57	28	794	3.0	70	31	749	1.3	55	31				
2,500					31	757	15.8	53	31	758	9.1	45	31	749	0.4	58	28	747	0.3	64	31				
3,000					31	713	12.1	55	31	713	6.3	38	31	703	-2.7	40	28	701	-2.1	60	31	704	-1.4	54	31
4,000					31	632	4.5	63	31	631	0.6	34	31	619	-8.8	46	27	618	-7.8	52	31	620	-6.7	45	31
5,000					31	558	-2.6	68	31	556	-5.8	34	31	543	-15.3	44	25	542	-14.4	50	31	545	-13.1	46	31
6,000					30	492	-9.0	67	31	488	-12.1	31	31	474	-22.3	25	25	474	-21.1	31	31	477	-19.8	43	31
7,000					28	432	-14.3	30	428	-19.2	31	31	414	-30.1	25	25	414	-28.3	29	29	416	-26.3	43	29	
8,000					27	377	-21.5	29	373	-26.9	31	31	359	-37.5	25	25	358	-35.8	28	28	362	-33.3	43	28	
9,000					27	329	-28.8	29	324	-34.6	30	30	309	-44.6	22	22	310	-42.7	25	25	314	-40.1	43	25	
10,000					26	286	-36.4	29	280	-42.3	28	28	266	-50.4	20	20	268	-48.2	24	24	271	-47.0	43	24	
11,000					25	246	-44.3	28	241	-50.1	28	28	228	-53.8	19	19	230	-52.8	24	24	233	-53.2	43	24	
12,000					18	212	-51.7	26	207	-56.5	26	26	195	-55.9	16	16	197	-55.0	24	24	199	-57.5	43	24	
13,000					7	182	-58.6	25	176	-61.0	25	26	160	-55.4											

TABLE 2.—Free-air resultant winds based on pilot balloon observations made near 5 p. m., E. S. T. (2200 G. C. T.) during May 1945. Directions given in degrees from north ($N=360^\circ$, $E=90^\circ$, $S=180^\circ$, $W=270^\circ$). Velocities in meters per second

TABLE 3.—Maximum free-air wind velocities (m. p. s.) for different sections of the United States based on pilot balloon observations during May 1945

Section	Surface to 2,500 meters (m. s. l.)				Above 2,500 to 5,000 meters (m. s. l.)				Above 5,000 meters (m. s. l.)						
	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station
Northeast ¹	45.2	SW.	1,541	22	Toledo, Ohio	47.6	WSW.	3,345	9	Boston, Mass.	83.5	NW.	9,300	30	Boston, Mass.
East-Central ²	36.4	WNW.	1,721	11	Norfolk, Va.	40.2	WNW.	4,705	10	Knoxville, Tenn.	63.2	W.	11,734	23	Raleigh, N. C.
Southeast ³	34.8	SW.	2,446	4	Charleston, S. C.	33.6	WNW.	4,691	1	Charleston, S. C.	46.8	NW.	13,391	9	Jacksonville, Fla.
North-Central ⁴	39.0	SW.	2,467	21	Milwaukee, Wis.	57.3	WNW.	5,000	30	S. Ste. Marie, Mich.	78.0	NNW.	11,525	5	St. Paul, Minn.
Central ⁵	42.0	NW.	1,500	7	Sioux City, Iowa	47.8	SW.	4,443	31	Goodland, Kans.	54.3	NW.	10,903	16	Goodland, Kans.
South-Central ⁶	37.7	S.	1,008	21	Oklahoma City, Okla.	42.2	W.	4,801	21	Oklahoma City, Okla.	60.0	SW.	9,833	31	Amarillo, Tex.
Northwest ⁷	30.3	NW.	1,143	31	Ellensburg, Wash.	40.5	NW.	4,733	6	Spokane, Wash.	56.8	NNW.	8,565	1	Glasgow, Mont.
West-Central ⁸	43.6	SSW.	2,079	17	Modena, Utah	41.8	WSW.	5,000	18	Cheyenne, Wyo.	54.8	WSW.	7,708	8	Sheridan, Wyo.
Southwest ⁹	39.2	NNW.	2,474	15	Burbank, Calif.	56.0	W.	4,917	24	Raton, N. Mex.	68.0	W.	6,357	24	Raton, N. Mex.

¹ Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.
² Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern

³ Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.
⁴ South Carolina, Georgia, Florida, and Alabama.

Michigan, Wisconsin, Minnesota, North Dakota

⁸ Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.

* Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.

⁷ Montana, Idaho, Washington, and Oregon.

Wyoming, Colorado, Utah, northern Nevada, and northern California.

Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.

Texas.

RIVER STAGES AND FLOODS

By C. R. JORDAN

Precipitation continued heavy during May in Central and Northeastern States and in the Northwest. Rainfall was generally below normal in the South Atlantic and Gulf Coastal Plains and from Montana southward over southwestern United States.

Excessive run-off that has persisted for several months continued in the four-State area of Iowa-Missouri-Nebraska-Kansas. Bankful stages were reached or exceeded several times during the month throughout this section. Floods also occurred in northern Indiana, southern Michigan, and Ohio. Run-off was below normal in the Southeastern States, particularly in Florida, and in western Texas and Oklahoma.

St. Lawrence Drainage.—Heavy rains fell over the southern Great Lakes drainage on May 14-16 and produced overflow in southern Michigan, northern Indiana, and Ohio. Maximum stages on many of the streams of Michigan were approached, but none were exceeded.

Atlantic Slope and East Gulf of Mexico Drainages.—Light overflow was reported at widely scattered points from Connecticut to Louisiana, but no general or serious overflow occurred. Water levels in the Everglades section of Florida were the lowest since observations were started in 1939, according to the United States Geological Survey. Subnormal stream flow has prevailed in many streams of the South Atlantic States for several months.

Mississippi System.—Heavy rains were frequent throughout the month over the central and northern Mississippi Valley, and flood stages were a constant threat in Iowa, Missouri, Nebraska, and Kansas. Rainfall was generally well distributed throughout the month, and unusually high stages were not reached, although the monthly discharge of many of the streams ranked high. Flood stages were exceeded at many stations one or more times during the month as shown by the table at the end of this report. (Some stations have been omitted from the table because the data have not been received from the district centers. These stations will be included in the report for June.) The United States Geological Survey report that record-breaking floods occurred in the Nishnabotna River Basin in southwestern Iowa. The stream reached a stage of 20.5 feet at Red Oak, Iowa, on May 22, as compared to the previous highest stage of record of 18.5 feet in 1937.

The following report of a flash flood in southern West Virginia was received from the Official in Charge, Chesapeake, Ohio:

A flash flood occurred in the vicinity of Caretta, McDowell County, W. Va., on May 29, which caused near \$30,000 damages as estimated by the editor of the Welsh Daily News, of Welsh, W. Va.

No lives were lost. The property damage included fences, highways, bridges, a short section of a railroad roadbed, business houses, homes, and other buildings; two coal mines were flooded.

The storm occurred during the passage of a cold front. No estimate of the amount of rainfall could be obtained. Sixteen hundredths of an inch were recorded at Gary, W. Va. (about 10 miles from Caretta), on the morning of the 29th, and none on the following day. The damaged area lies between two ridges which are somewhat higher than the flooded area.

The lower Mississippi River and tributaries were at high stages during the early part of May, but steadily falling stages generally prevailed throughout the month. Many stations were still above flood stage at the beginning of June.

West Gulf of Mexico Drainage.—There was light to moderately severe overflow of the Sabine and Trinity Rivers in Texas and the Rio Grande in New Mexico as shown in the flood stage table.

FLOOD-STAGE REPORT FOR MAY 1945

[All dates in May unless otherwise specified]

River and station	Flood stage	Above flood stages dates		Crest ¹		
		From	To	Stage	Date	
ST. LAWRENCE DRAINAGE						
<i>Lake Michigan</i>						
Red Cedar:	Feet			Feet		
Williamston, Mich.	7	15	20	8.7	18	
East Lansing, Mich.	8	16	21	9.7	19	
Grand: Lansing, Mich.	11	18	20	11.6	19	
<i>Lake Huron</i>						
Shiawassee: Owosso, Mich.	7	17	20	8.1	18	
<i>Lake Erie</i>						
St. Joseph: Montpelier, Ohio	10	16	22	14.3	18	
Maumee:						
Fort Wayne, Ind.	15	16	22	17.4	17	
Defiance, Ohio	10	18	20	11.6	19	
Napoleon, Ohio	10	18	19	10.5	19	
ATLANTIC SLOPE DRAINAGE						
Connecticut: Hartford, Conn.	16	19	22	17.6	21	
Chenango: Sherburne, N. Y.	8	18	18	8.2	18	
Chemung: Chemung, N. Y.	12	18	18	14.4	18	
Little Juniata: Spruce Creek, Pa.	7	18	18	7.9	18	
Fishing Creek: Enfield, N. C.	14	29	31	15.2	30	
Tar: Rocky Mount, N. C.	9	28	28	9.7	28	
Ocmulgee:						
Abbeville, Ga.	11	1	7	14.0	3-4	
Oconee: Mount Vernon, Ga.	16	3	6	17.0	5	
Altamaha:						
Charlotte, Ga.	12	3	12	16.3	8	
Piney Bluff, Ga.	17	6	9	17.6	8	
EAST GULF OF MEXICO DRAINAGE						
Apalachicola: Blountstown, Fla.	15	{ Apr. 27	9	10.7	1-2	
Alabama: Millers Ferry, Ala.	40	Apr. 27	20	17.0	17	
Tombigbee:				42.4	Apr. 29	
Lock No. 3	33	{ Apr. 29	5	41.9	1	
Lock No. 1	31	15	17	34.2	16	
Chickasawhay: Enterprise, Miss.	20	Apr. 29	5	33.0	2	
Pearl: Pearl River, La.	12	1	1	21.1	Apr. 30	
3			3	12.6	1	
MISSISSIPPI SYSTEM						
<i>Upper Mississippi Basin</i>						
Rock: Moline, Ill.	10	16	24	10.7	19-20	
Skunk: Augusta, Iowa	15	15	19	{ 16.4	16	
				{ 16.7	18	
Raccoon: Van Meter, Iowa	13	22	26	{ 13.4	15	
			28	{ 15.8	22	
Des Moines:				{ 14.0	25	
Tracy, Iowa	14	{ Apr. 28	Apr. 30	14.4	Apr. 30	
		15	18	16.7	16	
		25	(?)	17.6	27	
Eddyville, Iowa	15	{ Apr. 28	1	15.7	Apr. 30	
		15	19	18.7	17	
		25	(?)	18.6	27	
Ottumwa, Iowa	9	{ Apr. 30	Apr. 30	9.0	Apr. 30	
		15	19	13.0	17	
		25	(?)	12.1	28	
Mississippi:						
Keokuk, Iowa	12	15	20	14.5	17-18	
Quincy, Ill.	14	15	21	18.1	18	
				19.9	Mar. 27	
Hannibal, Mo.	13	{ Mar. 19	12	17.4	Apr. 8	
		15	23	16.9	Apr. 14	
			(?)	16.2	Apr. 19	
				16.3	Apr. 22	
				15.6	Apr. 27	
				13.9	9	
Louisiana, Mo.	12	{ Mar. 19	14	18.5	18	
		15	23	18.7	Mar. 27	
			(?)	16.0	Apr. 15	
				15.4	Apr. 19	
St. Louis, Mo.	30	19	24	32.1	22	
Cape Girardeau, Mo.	32	{ Apr. 13	3	37.9	Apr. 22	
		20	27	34.9	24	
<i>Missouri Basin</i>						
Solomon: Beloit, Kans.	18	22	24	23.5	23	
Smoky Hill:						
Lindsborg, Kans.	21	22	24	24.0	23	
Enterprise, Kans.	26	26	28	27.1	27	

See footnotes at end of table.

FLOOD-STAGE REPORT FOR MAY 1945—Continued

[All dates in May unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest ¹		
		From—	To—	Stage	Date	
MISSISSIPPI SYSTEM—continued						
Missouri Basin—Continued						
Republican:						
Guide Rock, Nebr.	9	13	14	10.0	14	
Scandia, Kans.	10	14	14	10.9	14	
Concordia, Kans.	8	14	14	9.7	14	
Clay Center, Kans.	15	14	16	18.8	15	
		21	24	20.8	22	
Wakefield, Kans.	11	21	23	13.8	22	
		14	17	18.6	16	
Little Blue: Hanover, Kans.	14	21	24	18.8	22	
		27	30	19.7	28	
Big Blue:						
Beatrice, Nebr.	16	21	21	16.5	21	
		14	17	28.1	14-15	
Blue Rapids, Kans.	20	21	24	32.8	22	
		26	29	30.7	27	
Kansas:						
Wamego, Kans.	16	16	17	17.0	16	
		22	25	19.5	24	
		27	29	18.0	28	
Topeka, Kans.	21	23	25	23.8	24-25	
		29	29	21.3	29	
LeCompton, Kans.	17	17	17	17.9	17	
		24	25	19.3	25	
Lawrence, Kans.	18	24	25	19.8	25	
		28	28	18.4	28	
Ohio Basin						
Hocking: Athens, Ohio	17	19	19	17.2	19	
Olentangy: Delaware, Ohio	9	18	18	9.5	18	
Scioto:						
LaRue, Ohio	11	17	19	12.0	18	
Prospect, Ohio	10	19	20	11.0	19	
Circleville, Ohio	14	18	20	16.6	19	
Chillicothe, Ohio	16	20	20	16.2	20	
Piketon, Ohio	16	18	21	17.9	19	
West Fork:						
Elliston, Ind.	18	17	22	22.3	20	
Edwardsport, Ind.	12	Apr. 28	1	14.6	Apr. 29	
			16	25		
White:						
Petersburg, Ind.	16	20	24	17.3	23	
Hazelton, Ind.	16	19	25	17.8	24	
Wabash:						
Wabash, Ind.	12	16	19	16.1	17	
LaFayette, Ind.	11	16	22	19.4	18	
Covington, Ind.	16	17	23	22.8	19	
Terre Haute, Ind.	14	16	25	18.3	20	
Vincennes, Ind.	14	21	28	17.0	24	
Mount Carmel, Ill.	17	21	27	19.3	25	
Ohio:						
Shawneetown, Ill.	33	25	26	33.0	25-26	
Dam No. 53, near Mound City, Ill.	42	23	28	43.4	25-26	
		Feb. 23	5	53.9	Mar. 11	
				53.8	Mar. 21	
Cairo, Ill.	40			-22		
		21	(?)	53.7	Mar. 2	
				46.5	Apr. 4	
				44.2	Apr. 17	
White Basin						
Black: Black Rock, Ark.	14	Feb. 21	27	20.0	Feb. 23	
				25.3	Feb. 28	
				23.9	Mar. 4	
				24.9	Mar. 7-8	
				22.0	Mar. 16	
				24.9	Mar. 20	
				22.3	Mar. 26	
				-27		
				27.1	Apr. 1	
				26.2	Apr. 3	
				27.0	Apr. 16	
				25.5	Apr. 20	
				-21		
				18.1		
				23.3		
				21.0		
				31.6	Mar. 23	
				33.4	Apr. 5	
				35.9	Apr. 18	
				27.3		
				36.4	Mar. 9	
				36.3	Mar. 25	
				39.2	Apr. 5	
				35.0	Apr. 13	
				41.0	Apr. 19	
				33.0	Apr. 20	
				29.8	Mar. 9	
				-10		
				29.1	Mar. 26	
				32.0	Apr. 4	
				28.7	Apr. 20	
				23.1	22-23	

See footnotes at end of table.

FLOOD-STAGE REPORT FOR MAY 1945—Continued

[All dates in May unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest ¹		
		From—	To—	Stage	Date	
MISSISSIPPI SYSTEM—continued						
White Basin—Continued						
White:						
Des Arc, Ark.	24	Feb. 26	10	33.3	Mar. 27	
				36.2	Apr. 4	
				30.2	Apr. 21	
				24.9	20-21	
				33.4	Mar. 14	
				34.5	Mar. 16	
				39.1	Apr. 10	
				29.4	25-26	
				38.6	Apr. 11	
				26.6	Apr. 30	
				33.5	Apr. 19	
				22.2	17	
				39.2	Apr. 26	
				27.2	26-29	
				38.1	Apr. 16	
				27.1	Apr. 26	
				26.6	Apr. 30	
				33.5	Apr. 19	
				22.2	17	
				38.5	Apr. 28	
				30.5	Apr. 30	
				34.0	Mar. 20	
				40.0	Mar. 20	
				39.7	Mar. 25	
				45.2	Apr. 17	
				15.8	Mar. 10	
				11		
				17.5	Apr. 5-6	
				16.7	Apr. 20	
				21		
				15.2	14-15	
				23.7	Apr. 7-8	
				24.6	Apr. 17	
				23.5	2-3, 10	
				20.2	Mar. 23	
				20.3	Mar. 26	
				21.9	Apr. 8	
				23.4	Apr. 20	
				21.5	3-5	
				22.8	10	
				30.7	Apr. 9-11	
				29.5	Apr. 28-29	
				34.7	Apr. 9-10	
				34.8	Apr. 13	
				33.2	Apr. 28	
				35.0	Mar. 26	
				35.8	Apr. 5	
				32.6	16	
				34.9	Apr. 29	
				46.3	Apr. 8	
				45.5	Apr. 25-27	
				45.2	Apr. 6	
				44.8	Apr. 26	
				47.1	Apr. 12	
				47.2	Apr. 14	
				47.5	Apr. 29	
				54.7	Apr. 11	
				-12, 14		
				45.2	Apr. 18	
				-19		
				55.5	Apr. 30	
				56.4	-30	
				45.2	Apr. 18	
				-19		
				45.6	Apr. 27	
				45.7	-30	

See footnotes at end of table.

FLOOD-STAGE REPORT FOR MAY 1945—Continued

[All dates in May unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest ¹		River and station	Flood stage	Above flood stages—dates		Crest ¹	
		From	To	Stage	Date			From	To	Stage	Date
MISSISSIPPI SYSTEM—continued											
<i>Lower Mississippi Basin—Continued</i>											
Mississippi—Continued.											
Donaldsonville, La.	Feet	28	Mar. 15	31	35.3	Apr. 29					
					24.9	Mar. 26					
					25.0	Mar. 30					
					25.8	Apr. 12,					
					15, 17						
					25.9	Apr. 28					
					19.1	May 2					
					19.2	Mar. 29					
					-30,						
New Orleans, La. ⁴	17	Mar. 16	28		19.6	Apr. 1					
					19.7	Apr. 12					
					19.8	Apr. 17					
					19.0	18					
<i>Atchafalaya Basin</i>											
Atchafalaya:											
Simmesport, La.	41	Mar. 20	30		51.4	Apr. 30					
					45.5	Apr. 20					
					45.6	Apr. 22					
					45.7	Apr. 25					
					—May 1						
Atchafalaya, La.	25	Mar. 8	(?)		28.4	6-8					
					27.7	19					
					7.2	Apr. 16					
					-17						
Morgan City, La.	6	Apr. 6	(?)		8.0	Apr. 28					
					May 11						
					-12						
					7.7	2					
					8.1	16					
					7.3	25					

FLOOD-STAGE REPORT FOR MAY 1945—Continued

[All dates in May unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest ¹		River and station	Flood stage	Above flood stages—dates		Crest ¹	
		From	To	Stage	Date			From	To	Stage	Date
WEST GULF OF MEXICO DRAINAGE											
Sabine: Bon Wier, Tex.	Feet							17	Mar. 18	3	19.8
										22.0	Mar. 27
										23.1	Apr. 5
										-18	Apr. 17
East Fork: Rockwall (near), Tex.	10		12	13		11.0					13
Trinity:											
Trinidad, Tex.	28	Apr. 26	Apr. 30			29.8	Apr. 29				
						24.6	Feb. 26				
						27.8	Mar. 21				
						-23					
Liberty, Tex.	24					27.0	Apr. 7				
						28.8	Apr. 15				
						-8					
Rio Grande:											
Embudo, N. Mex.	8		13	14		8.1					8
						8.0					8
Espanola, N. Mex.	7		21	23		8.1					13
						7.3					21
						27	29	7.9			26

¹ Provisional.² Continued into June.³ Levee broke at that stage.⁴ Stages after Mar. 23 affected by operation of Bonnet Carré Spillway.

CLIMATOLOGICAL DATA

CONDENSED CLIMATOLOGICAL SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS

[For description of tables and charts, see Review, January 1943, p. 15]

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and

lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

Section	Temperature										Precipitation										
	Section average		Departure from the normal		Monthly extremes						Section average		Departure from the normal		Greatest monthly			Least monthly			
					Station	Highest	Date	Station	Lowest	Date					Station	Amount	Station	Amount	Amount		
Alabama	69.5	-1.9	3 stations	100	31	Valley Head	31	1	3.29	-0.66	Childersburg	10.40	Lock No. 3	.13							
Arizona	65.6	-4	Maricopa	105	17	Chinle	10	20	.02	-30	Inner Canyon	.30	89 stations	.00							
Arkansas	66.2	-2.9	Morrilton	99	29	2 stations	32	5	5.23	+.26	Benton	8.76	El Dorado	.70							
California	59.6	-1.8	Cow Creek	109	3	Ellery Lake	8	19	1.26	+.31	Inskip	8.27	43 stations	.00							
Colorado	53.2	+.8	Eversoll Ranch	102	26	Dillon	12	3	1.52	-.36	Ovid	4.31	Ignacio	.00							
Florida	74.9	-.6	2 stations	105	31	2 stations	40	6	1.93	-1.94	Pensacola	6.91	Cedar Key	T							
Georgia	68.8	-2.8	do	102	31	3 stations	35	15	2.88	-.50	Lumber City	5.65	Camp Stewart	.72							
Idaho	53.2	+.2	3 stations	91	13	4 stations	21	1	2.65	+.97	McCall	5.63	Idaho Falls Airport	.74							
Illinois	58.1	-4.7	Mount Vernon	93	31	Freeport	24	1	5.26	+.15	Toulon	8.67	Elsah	.18							
Indiana	57.6	-4.7	New Harmony	91	31	2 stations	26	1	4.70	+.64	LaPorte	10.47	Boonville	.49							
Iowa	55.1	-5.0	2 stations	89	20	Osage	21	9	6.17	+2.07	Emerson	9.41	Estherville	4.25							
Kansas	61.6	-2.3	Cimarron	105	26	Atwood	23	16	3.50	-.31	Greenleaf	12.96	Johnson	.18							
Kentucky	61.6	-3.8	Russellville	93	31	Clermont	29	1	4.69	+0.75	Quicksand	6.87	Brownsville	.87							
Louisiana	71.7	-2.0	3 stations	95	19	4 stations	40	4	4.35	-.27	Gueydan	9.39	Hackberry	1.40							
Maryland-Delaware	60.2	-2.7	Cumberland, Md.	95	21	2 stations	21	2	4.32	+.82	Oxford	9.37	Great Falls, Md.	.53							
Michigan	49.0	-5.2	4 stations	86	21	Kenton	13	15	5.28	+2.00	Paw Paw	8.34	Germfask	2.31							
Minnesota	49.6	-5.6	New Ulm	85	6	Grand Rapids	17	1	2.66	-.62	Albert Lea	8.50	Gonvick	.51							
Mississippi	69.3	-2.5	3 stations	96	10	Edenburg	37	6	2.96	-.28	Forest	5.90	Enterprise	1.26							
Missouri	60.5	-4.0	Sikeston	92	31	4 stations	31	15	5.50	+.71	Maryville	9.24	Palmyra	1.79							
Montana	50.1	-1.9	Crow Agency	89	4	Opheim	3	8	1.94	-.17	Drummond	3.37	Poplar	.14							
Nebraska	56.0	-3.3	Culbertson	98	19	Harrison	17	3	3.74	+.35	Auburn	9.23	Haigler	.91							
Nevada	56.1	+.3	Overton	103	12	Ruby Lake	15	21	1.14	+.29	Lamoine	4.93	5 stations	.00							
New England	52.2	-3.0	2 stations	87	22	2 stations	24	10	6.01	+2.64	Pinkham Notch, N. H.	9.86	Slocum, R. I.	3.30							
New Jersey	58.4	-2.0	3 stations	90	22	Long Valley	29	12	4.78	+.16	Charlotteburg	8.74	Barnegat City	1.06							
New Mexico	61.0	+.13	do	103	27	Birmingham Ranch	11	19	.27	.95	Tucumcari Airport	2.27	53 stations	.00							
New York	52.6	-3.5	Little Falls No. 1	96	22	Allegany State Park	21	2	5.38	+1.90	Rifton	9.37	Fredonia	1.76							
North Carolina	64.2	-2.8	2 stations	96	19	Mount Mitchell	22	1	3.51	-.48	Parker	7.84	2 stations	1.04							
North Dakota	47.4	-5.8	Milnor	84	23	Center	10	1	1.54	-.77	Halliday	4.40	Tuttle	.80							
Ohio	56.1	-4.5	Philo No. 2	90	21	Millport	25	2	4.72	+.00	Montpelier	6.96	Fernbank	2.88							
Oklahoma	67.0	-1.3	Hollis	106	25	Hooker	27	4	2.37	-.23	Poteau	9.64	Waynoka	.17							
Oregon	53.4	+.2	Vernonia	95	5	3 stations	22	16	3.75	+.98	Valsetz	11.18	Hermiston	.64							
Pennsylvania	55.6	-2.1	2 stations	91	15	Kane	16	2	5.12	+.20	Millersburg	8.49	Holtwood	2.63							
South Carolina	68.0	-5	5 stations	100	31	Caesars Head	34	4	3.10	-.37	Coward	6.95	Cherokee (near)	1.05							
South Dakota	52.0	-4.4	6 stations	88	24	Ralph	11	8	2.75	-.11	Flandreau	7.20	Pollock	.53							
Tennessee	63.6	-3.3	5 stations	93	31	Rugby	29	1	5.58	+.48	Monterey	9.69	Memphis	2.36							
Texas	72.8	-.2	Presidio	110	27	Dalhart	31	16	1.64	-.26	Broxton	7.78	6 stations	.00							
Utah	56.2	+.7	Hanksville	95	14	Soldier Summit	9	18	1.13	-.06	Tony Grove R. S.	5.25	Bluff	.00							
Virginia	61.3	-3.0	Clarksville	92	15	3 stations	26	2	4.30	+.61	Burke's Garden	7.62	Cheriton	1.89							
Washington	56.4	+.13	Trinidad	95	30	Republic	24	6	2.76	+.90	Prindle	9.96	Port Townsend	.37							
West Virginia	57.9	-3.9	2 stations	95	21	Canaan Valley	19	2	5.01	+.02	Kumbrabow State Forest	8.28	Wardensville	2.58							
Wisconsin	51.0	-4.3	Menomonie	83	6	2 station	17	11	4.40	+.73	La Crosse Airport	8.01	Iron River	1.25							
Wyoming	49.6	.0	Lovell	87	4	Northeast Entrance	9	3	1.83	-.22	Grassy Lake Dam	4.92	Elk Mountain	.21							
Alaska (April)	25.9	-1.5	Wasilla	62	21	Allakaket	-33	3	1.06	-.41	Little Port Walter	10.72	3 stations	T							
April 1945																					
North Carolina	62.9	+.4	4 stations	92	14	2 stations	16	5	3.60	-.30	Highlands	9.71	Wadeston	.50							
Texas	64.4	-1.7	2 stations	102	15	do	11	4	3.47	+.56	Port Arthur	12.59	3 stations	.00							

¹ Other dates also.

MONTHLY WEATHER REVIEW

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS

District and station	Elevation of instruments		Pressure		Temperature of the air						Precipitation		Wind				Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms																	
	Barometer above sea level	Thermometer above ground	Anemometer above ground	Sea level	Station	Mean	Departure from normal	Maximum	Date	Mean maximum	Minimum	Greatest daily range	Total degree days	Mean temperature of the dew point	Total	Days with more than 0.01 inch or more	Average hourly velocity	Prevailing direction	Miles per hour	Maximum velocity															
	Fl.	Ft.	Ft.	Mts.	Mts.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	%	In.	in.	mi.	Direction	Date																
NEW ENGLAND																				0-10 In. In.	6.9														
Eastport	75	67	85	1,000.1	1,012.2	-2.4	46.4	-1.3	67	27	53	31	2	40	25	582	39	80	8.18	+5.2	2.25	16	10.4	s.	46	0.	11	5.0	16	6.8	T	.0	0		
Greenville, Maine	1,070	6	41	972.9	1,012.2	-4.6	32	-3.2	73	26	57	28	3	36	42	580	39	60	6.09	+2.9	1.50	18	10.0	s.	37	ne.	4	9.1	18	7.3	7.0	.0	1		
Portland, Maine	103	5	43	1,008.1	1,012.2	-2.7	49.5	-3.8	77	29	58	30	12	41	28	480	42	80	6.76	+3.4	1.89	17	10.0	s.	31	10.18	3.10	18	7.3	7.0	.0	5			
Concord	289	5	45	1,001.1	1,012.2	-2.7	52.0	-0.9	84	15	62	29	12	42	30	405	44	77	5.90	+3.0	1.06	20	9.0	n.	31	s.	28	1.1	24	8.3	T	.0	5		
Burlington	403	5	51	996.3	1,011.5	-3.4	52.2	-4.3	86	22	61	29	12	43	37	313	44	74	4.72	+1.3	1.15	16	12.4	n.	40	nw.	11	4	13	14	7.2	T	.0	5	
Boston	124	33	62	1,007.1	1,012.2	-3.0	55.2	-1.9	79	15	63	35	11	47	21	345	48	63	3.44	+6.1	1.12	12	12.7	sw.	34	ne.	19	12	8.1	5.6	.0	0	1		
Nantucket	12	11	59	1,011.9	1,012.5	-3.1	53.9	+1.6	66	29	61	37	3	47	21	309	47	64	4.39	+9	.97	13	15.4	sw.	48	nw.	11	5	15	15	7.0	.0	0	0	
Block Island	26	11	46	1,010.8	1,012.2	-3.4	53.2	-1.4	71	26	59	40	11	47	20	309	47	64	4.39	+6.1	1.12	12	12.7	sw.	34	nw.	11	5	15	15	7.0	.0	0	4	
Providence	150	46	60	1,006.4	1,012.2	-2.3	52.2	-1.3	79	26	66	38	11	48	32	250	44	73	4.25	+1.3	1.20	14	9.1	s.	34	nw.	11	5	10	100	0	3		
Hartford	150	5	44	1,006.4	1,012.2	-2.7	55.6	-1.9	79	26	66	37	10	46	22	292	50	72	6.01	+2.4	1.28	17	8.9	s.	28	nw.	11	10	5	100	0	4		
New Haven	107	5	39	1,008.5	1,012.2	-2.7	55.0	-0.4	77	29	64	38	11	46	32	313	46	75	5.41	+2.0	1.37	13	7.7	s.	28	nw.	11	10	5	10	6.3	.0	0	4	
MIDDLE ATLANTIC																				5.9															
Albany	97	26	40	1,007.8	1,011.9	-3.3	53.4	-4.3	85	22	63	32	20	44	38	360	44	72	4.82	+2.2	1.20	18	10.2	s.	35	w.	30	3	9	10	7.3	5.4	.0	8	
Binghamton	871	60	79	980.4	1,012.5	-2.7	54.5	-2.9	86	22	64	33	10	45	38	340	44	75	4.34	+1.0	1.30	16	6.8	w.	34	w.	30	1	10	20	7.8	.8	0	4	
New York	314	415	450	1,000.1	1,011.9	-3.7	58.9	-2.3	87	22	67	42	11	51	26	204	46	68	5.70	+2.6	1.80	13	15.6	s.	56	w.	22	9	11	11	5.7	0	0	8	
Harrisburg	374	30	49	998.6	1,012.5	-2.7	59.7	-2.1	87	15	70	37	2	49	34	202	46	68	5.85	+1.8	1.53	14	9.3	w.	30	n.	19	6	12	12	6.4	0	0	4	
Philadelphia	114	5	57	1,008.5	1,012.9	-2.7	60.2	-1.9	86	22	70	39	2	50	32	192	48	70	3.85	+6	1.95	12	12.7	sw.	32	w.	22	6	13	12	6.1	0	0	7	
Reading	323	47	306	1,000.1	1,012.5	-3.0	59.9	-2.0	86	15	70	38	2	50	31	197	47	70	4.79	+1.1	1.20	15	13.1	nw.	35	w.	22	10	9	12	5.9	0	0	5	
Scranton	805	72	104	983.1	1,012.5	-2.7	56.4	-3.0	87	22	66	36	10	47	36	290	49	74	5.78	+2.5	0.95	15	7.0	s.	26	nw.	31	6	15	10	6.1	T	.0	5	
Atlantic City	52	37	172	1,010.8	1,012.3	-2.0	55.6	+5	80	22	69	41	1	51	31	209	49	74	3.09	+0.0	1.06	12	16.9	s.	42	w.	11	9	9	13	5.9	0	0	5	
Trenton	190	89	107	1,005.4	1,012.8	-2.0	56.0	-0.2	86	22	70	40	1	51	30	182	48	60	4.14	+1.1	1.44	15	10.0	s.	20	w.	10	8	9	14	6.1	0	0	7	
Baltimore	123	100	215	1,008.1	1,012.9	-2.7	63.2	-0.8	87	22	72	43	11	55	31	128	48	66	3.50	+0.1	2.20	11	11.3	s.	41	sw.	22	14	9	8	4.8	0	0	3	
Washington	112	56	100	1,008.8	1,012.3	-2.7	63.8	-0.9	89	16	73	35	2	53	35	149	48	62	3.44	-3	.80	12	7.8	s.	26	nw.	11	12	8	5.0	.0	0	6		
Cape Henry	18	8	54	1,012.5	1,013.5	-0.9	64.9	+7	89	16	73	46	5	67	32	88	54	72	3.24	-7	.09	12	12.3	s.	46	nw.	11	12	8	5.5	.0	0	6		
Lynchburg	686	4	50	988.8	1,013.5	-2.4	62.1	-3.8	87	15	74	36	5	51	36	162	48	64	3.16	-5	.82	11	9.0	s.	36	sw.	16	11	10	10	5.5	0	0	4	
Norfolk	91	80	125	1,010.5	1,014.2	-1.7	66.4	+2	88	16	75	47	6	58	31	73	54	71	2.64	-1.2	.99	11	10.5	s.	27	w.	22	8	13	10	5.5	0	0	4	
Richmond	144	11	52	1,007.5	1,012.9	-2.7	64.2	-2.3	87	15	75	36	2	53	34	113	52	60	3.35	+1.6	1.85	11	8.2	sw.	27	nw.	10	12	10	9	3.2	0	0	4	
SOUTH ATLANTIC																				4.8															
Asheville	2,253	77	92	936.0	1,014.6	-1.0	60.5	-2.1	87	29	72	37	4	40	39	188	47	68	2.87	-6	.95	10	8.8	nw.	26	s.	16	7	12	12	6.0	0	0	5	
Charlotte	779	63	86	986.5	1,014.6	-1.0	66.6	-2.3	93	29	77	41	5	56	29	90	52	66	1.40	-2.2	.51	8	7.3	sw.	22	sw.	16	8	14	9	5.4	0	0	7	
Greensboro	886	6	56	982.7	1,014.9	-0.3	64.4	-3.0	89	29	75	36	5	52	37	134	52	72	1.11	+1.1	1.74	14	8.3	sw.	30	w.	5	7	14	10	6.0	0	0	6	
Hatteras	11	51	50	1,014.2	1,014.6	-1.7	67.4	-1.3	81	17	73	48	12	62	23	48	48	58	74	1.79	-1.9	.89	11	13.8	s.	38	w.	18	13	10	8	4.8	0	0	3
Raleigh	376	5	59	1,000.7	1,014.6	-1.0	65.8	-2.7	92	29	76	40	5	55	30	98	54	72	3.47	-3	.12	1.21	12	7.6	sw.	24	sw.	10	12	12	7	4.7	0	0	7
Wilmington	72	73	107	1,012.5	1,014.9	-1.4	66.6	-2.2	89	29	77	47	5	60	25	40	58	74	1.84	-1.6	.61	13	10.0	nw.	31	w.	3	14	11	6	4.5	0	0	7	
Charleston	48	11	92	1,012.3	1,015.2	-2.1	71.4	-1.1	90	31	78	52	4	64	22	11	59	76	2.32	-7	.14	10	7.5	s.	24	e.	11	17	4	10	4.2	0	0	4	
Columbia, S. C.	347	70	91	1,002.4	1,014.9	-1.0	69.1	-2.8	94	31	80	43	5	59	29	59	56	66	2.61	-5	.97	10	8.5	s.	29	w.	17	15	8	4.5	0	0	2		
Greenville, S. C.	1,040	18	36																																

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS

See footnotes at end of table.

CLIMATOLOGICAL DATA FOR WEATHER BUREAU STATIONS

District and station	Elevation of instruments		Pressure		Temperature of the air										Precipitation		Wind																	
	Barometer above sea level	Thermometer above ground	Anemometer above ground	Station	Sea level	Departure from normal	Mean	Maximum	Departure from normal	Mean maximum	Minimum	Mean minimum	Greatest daily range	Total degree days	Mean temperature of the dew point	Mean relative humidity	Total	Departure from normal	Greatest in 24 hours	Days with 0.01 inch or more	Average hourly velocity	Prevailing direction	Miles per hour	Maximum velocity	Clear days	Partly cloudy days	Cloudy days	Average cloudiness, tenths	Total snowfall	Snow, sleet, and ice on ground at end of month	Number of days with thunderstorms			
	ft.	ft.	ft.	mbs.	mbs.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	%	in.	in.	in.	mi.	date	date	date	date	in.	in.	in.	in.	in.	in.					
MIDDLE SLOPE																																		
Denver ¹	5,292	106	113	835.1	1,000.8	-7	57.2	+1.0	84	26	60	33	15	46	36	254	37	58	2.06	-2	.90	11	7.2	s.	28	me.	13	8.17	6.5	T	.0	6		
Pueblo ¹	4,600	5	36	853.7	1,000.8	-4	60.0	+1.1	93	26	75	33	3	45	47	178	36	54	.01	-7	.41	8	9.4	s.	45	w.	31	8.13	10.5	T	.0	7		
Concordia ¹	1,392	50	58	963.1	1,012.5	-5	50.4	-3.8	86	13	70	36	4	49	30	234	48	70	7.33	+3.2	3.58	16	8.8	s.	29	nw.	21	8.12	14.4	.4	.0	14		
Dodge City ¹	2,500	5	58	923.8	1,010.5	-1.0	61.8	-1.7	99	26	76	32	3	48	39	191	47	65	1.56	-3	.87	7	16.3	s.	43	nw.	21	8.12	11.1	5.8	.0	8		
Wichita ¹	1,358	6	64	963.8	1,011.5	-1.0	62.2	-2.9	91	27	73	37	17	52	52	191	51	70	1.28	-3.2	.64	16	8.8	s.	40	n.	16	9.11	11.1	5.7	.0	9		
Oklahoma City ¹	1,214	10	47	968.5	1,010.8	-1.4	67.2	-5	91	26	78	40	17	56	34	97	54	70	2.59	-2.3	2.02	7	10.8	s.	22	s.	20	11.13	7	5.2	.0	6		
Tulsa ¹	674	10	60	988.2	1,011.9	---	65.8	-1.4	90	30	76	40	17	55	37	120	54	70	1.33	-3.7	.76	9	13.1	s.	40	w.	21	9.12	10	5.6	.0	11		
SOUTHERN SLOPE																															4.5			
Abilene ¹	1,738	4	59	950.2	1,000.5	-2.0	73.0	+2.4	99	13	86	39	4	60	34	37	54	61	2.45	-1.5	1.22	6	16.8	s.	45	se.	24	12.13	6	4.5	.0	8		
Amarillo ¹	3,676	4	42	886.2	1,009.5	-1.0	66.0	+2.9	99	27	82	35	16	50	44	116	43	56	4.42	-2.4	2.48	28	16.1	sw.	50	se.	8.10	13.8	8.1	.0	4			
Del Rio	960	63	71	977.0	1,009.1	-1.7	78.7	+1.7	100	7	91	55	16	67	32	0	58	56	.96	-1.9	.05	21	11.4	s.	35	se.	1.14	10	7.4	.0	6			
Roswell	3,566	75	85	880.3	1,008.5	-1.3	71.1	+1.7	99	27	87	43	16	55	46	26	34	33	.02	-1.1	.02	1	10.0	s.	38	ne.	2.19	7	5.3	.0	0			
SOUTHERN PLATEAU																															3.5			
El Paso ¹	3,778	39	85	883.5	1,007.8	-7	73.2	+2.5	95	27	86	48	22	60	40	1	38	30	T	-3	T	0	12.9	w.	42	w.	20	10.19	9	3.3	.0	0		
Albuquerque ¹	5,314	5	45	835.1	1,006.8	66.2	+2.9	90	28	81	42	16	52	40	41	28	28	T	-6	T	0	11.0	w.	42	nw.	20	12.13	5	4.5	.0	0			
Flagstaff	6,907	36	51	789.7	1,012.9	+4.4	61.9	-1.2	77	4	68	23	20	35	41	404	21	25	T	-9	T	0	0	w.	10	20	1.1	4.0	T	.0	4			
Phoenix ¹	1,107	39	87	970.9	1,008.8	+3	76.0	+1.0	98	17	91	53	21	61	39	0	32	56	.00	-1.0	.00	0	7.3	e.	25	sw.	13	19.10	2	3.5	.0	0		
Tucson ¹	2,555	5	39	923.1	1,008.8	73.6	+4	96	17	89	49	21	58	38	1	28	20	.00	-2	.00	0	0	sw.	15	10	6	3.8	.0	0	0				
Yuma	142	9	54	1,004.4	1,008.5	-3	77.0	+8	101	16	84	21	60	41	0	38	32	.00	-0	.00	0	6.4	w.	26	w.	29	28	1	2	1.9	.0	0		
MIDDLE PLATEAU																															6.0			
Reno ¹	4,527	20	52	860.5	1,012.9	-0.5	53.4	+5	87	2	70	26	18	37	48	350	34	56	2.4	-4	.11	7	9.7	w.	42	s.	16	3.16	12	6.5	T	.0	6	
Tonopah ¹	4,090	9	20	811.4	1,009.5	54.8	+5	81	2	68	30	19	42	32	320	29	42	.40	-0	.18	6	6	sw.	6	20	5	6.8	.0	0	4				
Winnemucca ¹	2,339	5	56	864.9	1,011.5	-1.4	55.4	+1.5	85	2	69	30	19	42	29	35	55	1.04	+2	.54	16	8.1	sw.	32	w.	12	3.11	17	6.9	.0	3			
Modena ¹	5,473	10	46	830.3	1,008.8	-1.0	54.1	+6	80	1	72	25	21	37	44	340	36	56	.24	-1	.00	0	7.3	sw.	38	sw.	18	9.22	0	4.4	T	.0	3	
Salt Lake City ¹	4,227	32	58	863.9	1,009.8	-1.4	56.6	+2.9	82	3	72	38	18	40	202	38	54	.90	-9	.30	8	10.2	se.	38	w.	13	8.14	12	6.2	T	.0	7		
Grand Junction	4,602	60	68	855.7	1,008.8	-1.4	63.6	+2.5	85	26	76	42	16	51	33	86	30	36	.45	-4	.23	6	7.4	se.	31	s.	30	7	9.15	6.0	T	.0	5	
NORTHERN PLATEAU																															6.2			
Baker ¹	3,471	36	54	863.3	1,013.2	-1.4	52.4	+7	82	3	65	32	17	40	42	391	33	68	2.09	+5	.64	17	5.9	n.	23	sw.	22	6.12	13	6.4	.0	3		
Boise ¹	2,739	5	49	916.7	1,011.9	-2.0	56.6	+5	84	3	69	36	18	44	38	265	40	60	2.21	+8	.61	13	9.0	nw.	29	o.	16	5.12	14	6.6	T	.0	6	
Pocatello ¹	4,478	5	31	860.1	1,011.9	-3.5	55.0	+2.0	82	4	68	35	16	42	45	311	36	56	.24	+4	.72	10.7	sw.	34	sw.	21	5.11	15	6.8	.0	5			
Spokane ¹	1,929	27	42	944.1	1,012.5	-2.1	56.9	+1.4	83	30	69	38	22	44	39	250	40	62	2.20	+8	.77	15	7.2	ne.	24	w.	3	6.12	13	6.1	.0	5		
Walla Walla	991	57	65	977.3	1,012.9	-1.7	61.4	+1.8	86	30	72	45	22	51	32	138	28	60	.21	+7	.65	14	5.1	s.	17	sw.	31	10.12	9	5.3	.0	2		
Yakima	1,076	58	67	973.9	1,012.5	-1.6	61.8	+2.8	89	30	74	39	17	50	36	144	28	64	.94	+3	.30	9	6.8	nw.	21	sw.	9	6.14	11	6.0	.0	2		
NORTH PACIFIC COAST																															7.1			
North Head	211	5	55	1,008.1	1,015.2	-1.7	53.0	+2.1	68	1	57	46	1	49	22	376	49	87	4.62	+1.7	1.02	13	13.6	n.	47	s.	10	2	5.24	8.2	.0	0	0	
Seattle ¹	125	90	321	1,010.2	1,014.6	-1.7	58.8	+2.2	88	2	67	48	11	50	36	203	46	70	2.71	+8	.88	11	8.8	s.	35	sw.	13	6.11	14	6.1	T	.0	2	
Tacoma	194	172	201	1,008.1	1,014.6	-2.0	57.4	+3.3	85	7	50	33	24	11	48	36	244	38	86	3.86	+1.7	1.11	11	8.3	n.	27	s.	10	8.10	13	6.1	T	.0	0
Tatoosh Island	86	9	61	1,011.9	1,014.6	-1.7	52.1	+2.5																										

SEVERE LOCAL STORMS, MAY 1945

[Compiled by MARY O. SOUDER]

[The table herewith contains such data as has been received concerning severe local storms that occurred during the month. A revised list of tornadoes will appear in the United States Meteorological Yearbook]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Madison County, Fla.	May 3				\$1,500	Electrical.	Barn struck by lightning and burned.
Madison and Gadsden Counties, Fla.	3				5,000	Hail.	Loss in tobacco crop.
Oneonta, N. Y., and vicinity.	10					Snow.	Storm general throughout the State with from 1 to 7 inches recorded. Extensive damage to power and communication lines. Albany had 4 inches of snow on the ground, far surpassing its previous May record. Highways in some sections clogged with 15 inches of snow. In Vermont 50 percent of apple and peach crop ruined, while on Cape Cod, Mass., only 75 percent of strawberries were left to ripen. In New Hampshire loss in fruit crop was 90 percent. Up to 18 inches of snow was recorded during this storm.
New England States	10-11			2	1,000,000	do.	Stones 2 inches in diameter; windows broken. Livestock lost in floods included small calves in pasture, 300 turkey hens, and 300 or more chicks. 4 bridges washed out and several damaged including approaches; several basements at Riverton flooded and damaged, and railroad tracks washed out in places.
Conecordia, Kans.	13					Hail.	Loss in Crawfordville, \$10,000; slight damage elsewhere.
Franklin County, Nebr., southern portion.	13				20,000	Rain and flash flood.	Livestock lost in floods included small calves in pasture, 300 turkey hens, and 300 or more chicks. 4 bridges washed out and several damaged including approaches; several basements at Riverton flooded and damaged, and railroad tracks washed out in places.
Crawfordville and Parke, Hamilton, and Vanderburgh Counties, Ind.	14	12 p. m.			10,000	Wind.	Trees down, streets flooded, houses and automobile roofs damaged by hail, loss in crops, and greenhouses wrecked. Water undermined the track causing the engine and a car of a freight train to leave the tracks. 2.15 inches of rain recorded in the 2-hour period.
St. Louis, Mo., and vicinity	14	7:44 p. m.			200,000	Hail, wind, and rain.	Trees and wires down; property damaged.
Rockville, Danville, and Indianapolis, Ind.	14	p. m.			28,000	Wind.	Considerable damage occurred in parts of these cities from strong wind, but practically all of minor nature such as breaking off of tree branches, damaging roofs here and there, uprooting a few trees, and interrupting electric service.
Louisville, Ky., and Jeffersonville, and New Albany, Ind., just across the Ohio River from Louisville.	15	12:02-12:50 a. m.				Thunderstorm and wind.	This storm accompanied by a small tornado moving in from the northwest at about 12:50 a. m., C. S. T., and apparently dipping to the ground once, then lifting and dipping again about 1,320 yards further eastward as it passed over Jeffersonville, Ind.
Jeffersonville, Ind.	15	1:50 a. m., C. W. T.	100	0	150,000	Tornado.	2 buildings of American Car & Foundry Co. completely destroyed, 1 damaged, and a warehouse unroofed. Storm dipped at point of greatest destruction; path 300 yards long.
Idabel, Okla., and vicinity.	15	8 a. m.		1		Tornado and hail.	Several persons injured and several houses demolished.
Austin, Tex., and vicinity.	15	9:37-9:50 p. m.			455,000	Hail.	Most damage in the northern and western portion of the city. Damage to automobiles, houses, and gardens, and other property.
Alachua and Orange Counties, Fla.	15				750	do.	Loss in corn, eggplant, and melon crops.
Muskogee, Okla.	15					do.	About 50 percent of aircraft used in crew training at the Army Airfield damaged. Suddenness with which the storm struck prevented removal of the planes from the flight line to the hangars.
Centre Hall, Pa.	17	4 p. m.		0	100,000	Tornado.	Property damage.
Madison County, Fla.	17				4,000	Hail.	Loss in tobacco, corn, and melon crops.
Norfolk, Va., vicinity of	18				10,000	do.	Truck considerably damaged over limited area; some fields had to be replanted.
Minnesota, south-central portion.	20				1,000,000	Rain and hail.	Albert Lea, Minn., hardest hit, where not a single house escaped without at least a window broken and not a roof in town escaped damage. In Austin, Minn., hailstones as large as moth balls stripped garden plants. Three florists with a total of 20 greenhouses reported that their buildings had been wiped out completely.
Montgomery to Dallas and Black Hawk Counties, Iowa.	21	p. m.		0	100,000	Heavy rain, small tornadoes and hail.	In Redfield, 4 persons were injured, 1 seriously. Hail damage in Black Hawk County, \$100,000.
Hebron, Nebr., and vicinity.	26				350,000	Wind.	Property damaged.
Shullsburg to Belmont, Wis.	27	7:20 p. m.		0		Tornado.	Outbuildings on 2 farms demolished; barn unroofed in Belmont.
Broken Bow, Nebr., and vicinity.	27				400,000	Rain.	4 inches of rain fell, causing a flash flood in Custer County, centering in Broken Bow.
Cairo, Ill., and vicinity, and Ballard County, Ky.	29	9:00-10:40 a. m.			302,400	Thunderstorm and hail.	In Illinois, crop loss, \$10,000; property damage, \$257,500; in Kentucky, crop loss, \$18,000, and property damage, \$16,900.
Sioux Falls, Canton, and Beresford, S. Dak.	31	9 p. m.				Wind.	Several buildings unroofed; windows broken; trees uprooted; and communication lines and poles down.
South Dakota, eastern portion.	31	p. m.				Heavy rains.	Storm especially heavy in Beadle, Jerauld, and Codington Counties, where fields and highways were flooded.

NOTE.—Late reports for May will appear in the June issue of this publication.

SOLAR RADIATION AND SUNSPOT DATA FOR MAY 1945

[Solar Radiation Investigations Section, I. F. HAND, in charge]

SOLAR RADIATION OBSERVATIONS

Explanations of the tables and references to descriptions of instruments, stations, and methods of observations, and to summaries of data, are given in the January 1944 REVIEW, page 43. A list of the pyrheliometric stations also is given on page 45 of the same REVIEW.

TABLE 1.—*Solar radiation intensities during May 1945*
[GRAM CALORIES PER MINUTE PER SQUARE CENTIMETER OF NORMAL SURFACE]

MADISON, WIS.

Date	Sun's zenith distance									
	7:30 a. m.		78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°
	75th mer. time	e.	5.0	4.0	3.0	2.0		2.0	3.0	4.0
May 1	4.6	0.53	0.69	0.71	0.81					5.6
May 5	5.8	.69	.79	.90	1.08	1.35				6.1
May 9	4.4	.70	.80							3.8
May 13	6.4									8.5
May 18	5.6		1.16	1.35	1.55					7.2
May 19	7.4	.42	.43	.41	.74	1.32				6.4
May 23	8.5	.73	.84	.98	1.16	1.36				7.8
May 30	8.4	.79	.88	.98	1.15	1.39				9.1
Means		.64	.80	.86	1.06	1.36				
Departures		+.02	+.03	-.10	-.04	-.01				
LINCOLN, NEBR.										
May 4	5.8					1.40	1.11	0.94	0.77	0.66
May 5	6.4					1.16	1.40	1.14	.94	.79
May 7	6.4					1.35	1.05	.79	.62	.52
May 17	7.2					1.40	1.13	.92	.79	.72
May 22	8.4					1.38				9.4
May 25	13.7					1.18				19.0
Means						(1.16)	1.35	1.11	.90	.74
Departures						+.04	-.03	-.02	-.01	-.06
ALBUQUERQUE, N. MEX.										
May 1	5.2	0.73	0.82	0.97	1.14	1.47	1.35	1.27	1.25	1.22
May 2	5.4	.82	.88	1.02	1.16	1.37	1.40	1.30	1.28	1.27
May 3	5.4	.67	.81	.88	1.05	1.39	1.23	1.19	1.14	1.12
May 4	5.0					.94	1.52			6.3
May 5	5.6	.63	.73	.88	1.02	1.51	1.23	1.20		7.3
May 6	4.4	.69	.77	.90	1.08	1.47				8.2
May 7	5.2					1.53				6.8
May 8	4.6	.73	.83	.93						4.4
May 9	4.4					1.07	1.40	1.31	1.24	1.21
May 10	4.8					1.10	1.41	1.27	1.25	1.20
May 11	4.4	.65	.73	.84	1.02					3.8

TABLE 1.—*Solar radiation intensities during May 1945—Continued*
ALBUQUERQUE, N. MEX.—Continued

Date	Sun's zenith distance									
	7:30 a. m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°
		75th mer. time	A. M.	P. M.	P. M.	P. M.				
May 12	2.9									
May 13	4.0									
May 16	5.4	.83	.92	1.01	1.17	1.46	1.26	1.17	1.11	1.06
May 17	5.0	.89	.99	1.10	1.21	1.42				
May 19	4.0									
May 20	3.3									
May 21	3.4	.78	.84	.94	1.08					
May 22	4.2	.73	.79	.87	1.04	1.44				
May 26	3.3									
May 27	4.6									
May 28	2.7									
May 29	3.4									
May 30	3.0	.86	.92	1.01	1.40	1.14	1.05	.95	.84	3.8
May 31	2.3	.80	.88	1.01	1.12	1.42				
Means		.75	.84	.94	1.10	1.45	1.24	1.16	1.04	1.01
Departures		-.08	-.07	-.09	-.09	-.04	+.01	+.03	+.04	+.07

BLUE HILL, MASS.

May 2	8.7									0.66
May 7	10.2									7.2
May 9	6.4	.32	.44	0.60	0.91					4.6
May 11	6.9									4.4
May 12	7.2									5.1
May 14	11.8	.49	.50	.75						11.0
May 20	7.2	.83	.94	1.04	1.19	1.45				5.6
May 23	10.2	.71	.82	.95	1.12					9.8
May 24	9.1	.70	.79							6.6
May 26	11.4	.60	.60	.83	1.03					11.4
May 28	12.3						1.36			9.8
May 30	11.4						1.18			8.4
May 31	7.2	.72		1.01			1.24	1.05	.94	.85
Means		.62	.73	.88	1.08	(1.40)	1.07	.92	.73	.66
Departures		-.01	-.04	-.07	-.01	+.04	+.01	+.05	.00	+.02

BOSTON, MASS.

May 9	6.1									7.4
May 14	11.0	.44	.50	.67	.88					9.4
Means		(.44)	(.50)	(.67)	(.90)	(1.42)				

RATIO, BOSTON/BLUE HILL, ON COMPARABLE DATES

	(0.90)	(0.85)	(0.89)	(1.00)						
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*Extrapolated.

TABLE 2.—*Daily totals and weekly means of solar radiation (direct + diffuse) received on a horizontal surface*
 [Gram calories per square centimeter]

Date	Washington, D. C.	Madison, Wis.	Lincoln, Nebr.	E. Lansing, Mich.	New York, N. Y.	Fresno, Calif.	Fairbanks, Alaska	Columbia, Mo.	Boston, Mass.	Nashville, Tenn.	Twin Falls, Idaho	La Jolla, Calif.	Riverside, Calif.	Blue Hill, Mass.	Ithaca, N. Y.	State College, Pa.	Put-in-Bay, Ohio	E. Wareham, Mass.	Davis, Calif.	Boulder, Colo.	Tooele, Utah	
1945	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	col.	
Apr. 30	506	700	503	348	304	656	402	688	120	489	579	556	576	102	335	491	506	254	720	567	638	
May 1	410	526	218	389	50	652	325	143	267	486	506	578	536	277	131	334	682	465	714	667	825	
May 2	594	76	423	271	205	644	359	365	492	234	624	449	632	507	472	634	497	606	701	575	798	
May 3	64	385	563	40	125	634	588	224	490	188	634	492	606	471	201	66	80	472	693	700	819	
May 4	354	670	697	136	45	575	513	741	24	177	449	496	628	120	236	211	97	100	703	586	561	
May 5	392	752	710	162	368	646	581	732	307	518	584	466	584	595	206	279	246	499	442	442	647	
May 6	363	664	492	559	283	630	599	624	415	666	663	602	597	302	110	214	625	632	706	260	547	
Mean	383	539	528	272	198	634	481	502	302	394	589	520	594	332	242	319	390	433	668	542	691	
Departure	-93	+96	+76	-53	-247	+14	+53	+92	-79	-49	+57	-40	+65	-115	-163	-4	-26	+26	-	-	-	-
May 7	602	296	647	211	478	596	455	252	378	258	667	457	514	437	665	580	473	444	674	187	831	
May 8	391	707	225	494	122	654	536	398	324	682	618	299	376	384	403	572	670	494	638	96	786	
May 9	604	413	49	511	625	684	504	176	508	410	614	527	515	686	504	679	543	640	667	578	782	
May 10	71	677	347	316	54	610	618	422	86	178	236	306	601	116	62	74	152	123	700	647	414	
May 11	705	270	235	491	735	698	423	582	393	424	437	184	476	392	660	743	679	466	724	444	792	
May 12	683	379	511	194	562	528	391	579	498	160	361	152	264	513	468	620	200	596	176	594	616	
May 13	493	619	240	520	268	457	456	692	112	503	379	524	452	129	185	350	561	121	565	519	790	
Mean	533	480	322	391	409	604	483	443	341	386	473	363	457	380	421	517	468	412	592	438	716	
Departure	+65	+29	-124	+61	-31	-32	+33	-8	-75	-80	-92	-200	-87	-91	-22	+60	+71	-57	-85	-	-	-
May 14	680	163	71	39	591	522	559	392	511	544	428	518	586	618	281	625	298	680	483	99	591	
May 15	582	594	509	179	461	711	613	68	524	388	529	573	638	613	304	517	511	361	747	99	755	
May 16	654	293	417	68	453	671	584	51	241	414	227	574	676	322	522	52	424	610	299	738	-	
May 17	374	265	759	52	449	731	624	70	105	126	475	480	662	199	291	200	65	282	675	445	678	
May 18	542	767	396	276	207	643	617	741	74	108	435	566	698	124	273	407	125	154	648	764	765	
May 19	543	704	438	682	85	613	612	505	74	636	392	570	664	100	319	598	743	224	782	686	767	
May 20	753	232	664	382	724	733	619	645	669	682	312	599	702	726	714	746	574	791	720	150	588	
Mean	590	431	465	240	437	661	604	353	318	414	400	554	661	386	343	516	283	418	667	364	697	
Departure	+111	-38	-44	-91	-28	+13	+147	-122	-120	-74	-192	-7	+114	-116	-117	+58	-127	-62	-23	-	-	-
May 21	602	315	127	559	496	513	421	412	220	632	477	635	698	261	427	679	670	352	634	411	684	
May 22	593	478	759	79	562	600	315	780	573	656	359	652	711	638	485	514	201	673	696	488	529	
May 23	650	757	588	565	618	719	412	474	489	704	267	640	714	540	159	525	752	642	715	527	641	
May 24	745	565	578	566	526	741	581	101	576	642	314	686	733	604	742	736	576	571	755	673	857	
May 25	652	352	714	211	608	706	413	554	538	314	507	687	711	534	710	677	399	616	728	616	753	
May 26	104	595	234	286	556	726	282	598	582	620	529	617	728	670	562	228	547	707	681	686	555	
May 27	118	177	275	445	88	742	496	450	307	655	595	716	368	96	200	602	456	636	344	357	833	
Mean	508	463	468	388	494	678	417	481	469	603	436	639	716	517	454	510	561	574	692	535	693	
Departure	+15	-23	-71	+32	+30	+11	-35	+13	-3	+89	-109	+129	+162	+57	-26	+56	+94	+72	+20	-	-	
May 28	415	575	708	343	285	724	328	99	163	556	400	634	546	190	272	363	694	392	725	322	827	
May 29	649	647	459	407	736	448	292	394	604	276	397	431	430	628	634	712	542	590	480	101	817	
May 30	749	807	658	658	769	318	372	580	539	452	304	616	118	528	600	813	787	665	294	543	685	
May 31	670	290	532	532	368	764	579	299	715	596	600	532	485	311	707	797	435	712	480	612	764	
June 1	596	174	708	133	265	707	398	628	640	680	473	676	703	338	241	280	649	757	470	850	-	
June 2	521	147	207	235	235	645	501	379	439	576	212	566	329	204	349	395	280	418	450	678	-	
June 3	723	287	446	63	71	610	457	274	412	374	557	398	257	73	304	59	368	514	357	366	-	
Mean	618	418	531	317	446	576	378	424	455	482	466	487	435	478	400	511	456	522	524	408	713	
Departure	+106	-72	+5	-71	-53	-92	-103	-57	-72	-55	-113	-54	-91	-60	-92	+48	-51	-26	-128	-	-	-

ACCUMULATED DEPARTURES ON JUNE 3, 1945

+1,603	+3,031	-3,899	-2,128	-2,303	+735	+154	+280	-280	-3,332	-5,838	-5,257	+5,341	-3,507	-2,653	+4,004	+1,029	-147	-154	-	-
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POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MAY 1945

By LUCY T. DAY

[Equatorial Division, U. S. Naval Observatory]

[Communicated by Commodore J. F. Hellweg, U. S. N. (Ret.) Superintendent, U. S. Naval Observatory.] All measurements and spot counts were made at the Naval Observatory from plates taken at the observatories indicated. Difference in longitude is measured from the central meridian, positive toward the west. Latitude is positive toward the north. Areas are corrected for foreshortening and expressed in millionths of Sun's hemisphere. For each day, under longitude, latitude, areas of spot or group, and spot count are included assumed longitude of center of the disk, assumed latitude of center of the disk, total area of spots and groups and total spot count.

Date	Eastern standard time	Mount Wilson group No.	Heliographic				Area of spot or group	Observatory
			Difference in longitude	Longitude	Latitude	Distance from center of disk		
1945 May 1	10 26	7744	-63	332	-25	64	145	F U. S. Naval.
		7743	-49	346	-19	50	12	
		7741	-3	32	-20	17	97	
		7741	0	35	-18	15	242	
		7741	+2	37	-18	14	218	
		7741	+4	39	-19	15	97	
		7740	+40	75	-20	42	6	
		7739	+73	108	-32	73	97	
			(35)	(-4)			914	33

MONTHLY WEATHER REVIEW

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS FOR MAY 1945—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic				Spot count	Plate quality	Observatory	Date	Heliographic				Area of spot or group	Spot count	Plate quality	Observatory	
			Difference in longitude	Longitude	Latitude	Distance from center of disk					Area of spot or group	Difference in longitude	Longitude	Latitude	Distance from center of disk				
May 14	15 10	(*) 7746 7744 7741 7741	° -32	321	-25	39	12	F	U. S. Naval.	1945 May 17	° -56	127	-17	58	12	4	G	U. S. Naval.	
			-25	328	+23	36	36				-46	137	-27	51	24	6			
			-22	331	-26	30	85				-39	144	-25	43	24	3			
			+40	33	-17	42	45				-35	148	-27	40	61	7			
			+43	36	-18	45	339	9			+55	238	-22	57	121	10			
			(353) (-4)				520	18			(183) (-2)				339	37			
			-12	330	-23	22	12				-58	112	+28	63	6	1	F		
			-12	330	-26	26	73				-57	113	+27	62	6	1			
			+47	29	-21	49	61				-43	127	-9	45	12	1			
			+50	32	-16	51	36				-42	128	-17	44	6	1			
5 10 8	7749 7744 7741 7741 7741 7741	+52 34 -17 53 36	-17	145	6						-28	142	-25	35	6	3			
			(342) (-4)				194	9			-21	149	-27	32	48	4			
			-69	239	-23	70	242				+69	239	-23	70	242	1			
			+54	36	-18	55	194				+74	244	-21	74	158	3			
			(329) (-4)				521	24			(170) (-2)				484	15			
			+1	330	-23	20	6				Do.						P		
			+1	330	-26	21	48				18	10 23	7757	-58	112	+28	63	6	1
			+19	348	-19	23	12				-42	115	+27	45	12	1			
			+21	350	-19	25	24				-39	118	+29	47	12	1			
			+43	12	-18	45	6				-29	128	-10	30	24	1			
6 10 27	7749 7744 7748 7748 7747 7741 7741	+67 36 -17	67	194	5						-7	150	-27	27	12	4			
			+69	38	-18	69	194	1			-5	152	-27	26	36	1			
			+71	40	-16	71	24	1			+81	238	-22	81	194	1			
			(329) (-4)				508	18			(157) (-2)				296	10			
			+11	327	-23	22	6				Do.						P		
			+14	330	-25	25	48	1			20	12 38	7758	-63	94	-36	69	6	1
			+31	347	-18	34	36	1			-28	115	-35	42	12	1			
			+38	354	-18	40	97	3			-13	130	-11	15	36	1			
			+80	36	-17	80	388	5			+1	144	-24	22	6	1			
			(316) (-4)				575	12			+5	148	-28	27	12	4			
7 10 40	7749 7744 7748 7748 7741	+27 331 347 354 -17	-23	32	12	3					+10	153	-28	28	36	1			
			(302) (-3)				132	18			(143) (-2)				108	9			
			+40	320	-23	43	24	5			Do.						F		
			+58	347	-19	60	24	2			22	10 27	7759	-45	98	-36	53	6	1
			+65	354	-19	67	48	1			-11	120	+29	32	36	1			
			(289) (-3)				96	8			-9	122	-35	35	6	1			
			(277) (-3)				72	7			0	117	+29	31	24	1			
			+19	282	-18	23	6	1			+20	137	-35	37	12	5			
			+42	305	-27	47	6	1			+33	150	-27	40	36	3			
			(263) (-3)				12	2			(117) (-2)				102	19			
10 9 13	7750 7750 7749 7748 7748	+21 300 +50 +70 +78	-19	298	26	12	2		Mt. Wilson.	G	Do.						G		
			+23	327	-23	52	6	1			-15	116	-35	30	6	1			
			+27	327	-23	52	6	1			-11	120	+29	32	36	1			
			+45	347	-18	48	24	3			-9	122	-35	35	6	1			
			+52	364	-18	54	48	6			0	131	-11	9	24	1			
			+70	370	-19	72	24	1			+18	149	-27	32	12	3			
			+78	355	-19	78	24	2			+22	153	-28	33	24	2			
			(277) (-3)				72	7			(131) (-2)				108	9			
			(223) (-3)				78	7			Do.						F		
			(210) (-3)				340	9			23	10 49	7763	-84	20	-15	84	48	2
11 10 25	7751 7751	+19 +42	-18	282	23	6	1				-64	40	-18	65	12	1			
			-27	305	-27	47	6	1			-58	46	-14	50	5	1			
			(263) (-3)				12	2			+11	115	+27	31	73	13			
			(250) (-3)				12	2			+15	119	+27	33	24	7			
			No spots	303	-18	80	12	1			+33	137	-32	42	12	3			
			(197) (-2)				78	7			+48	152	-26	52	6	1			
			(223) (-3)				78	7			(104) (-2)				181	28			
			(210) (-3)				340	9			Do.						F		
			(207) (-2)				382	20			Mt. Wilson.								
			(197) (-2)				382	20			U. S. Naval.								
15 10 28	7753 7753 7752 7752 7752	-88 -80 -78 +16 +50	-27	135	-27	88	24	1											

POSITIONS, AREAS, AND COUNTS OF SUPPORTS FOR PROVISIONAL RELATIVE SUNSPOT NUMBERS FOR MAY 1945—Continued

Date	Eastern standard time	Mount Wilson group No.	Heliographic				Area of spot or group	Spot count	Plate quality	Observatory	[Based on observations at Zurich except as indicated by an asterisk. Data furnished through the courtesy of Prof. W. Brunner, Swiss Federal Observatory, Zurich, Switzerland]					
			Difference in longitude	Longitude	Latitude	Distance from center of disk					April 1945	Relative numbers	April 1945	Relative numbers	April 1945	Relative numbers
1945 May 27	8 12 10	7763 7766 7766 7764	° -28	22	-16	32	73	1	P	Mt. Wilson.	1	b50	11	0	21	31
			+17	67	-30	23	6	1			2	d57	12	0	22	31
			+21	71	-19	27	6	1			3	52	13	Ee7	23	a38
			+78	128	-19	78	97	1			4	50	14	10	24	29
			(50)	(-1)			182	4			5	38	15	10	25	d52
	28	7763	-15	22	-16	20	61	2	F	U. S. Naval.	6	32	16	a20	26	a46
			(37)	(-1)			61	2			7	28	17	Ee21	27	56
			(25)	(-1)			114	16			8	8	18	23	28	55
			(25)	(-1)			114	16			9	8	19	d32	29	71
			(25)	(-1)			114	16			10	7	20	32	30	d67
29	10 10 30	7763 7767 7767 7767 7767	-2	23	-16	15	24	1	G	Do.	Mean, 30 days=32.0					
			+16	41	+31	36	24	5				c Passage of an average sized group through the central meridian.				
			+18	43	+32	37	26	3				b Passage of a large group through the central meridian.				
			+20	45	+31	37	24	6				c New formation of a group developing into a middle sized or large center of activity; E, on the eastern part of the Sun's disc; W, on the western part; M, in the central circle zone.				
			+21	46	+27	35	6	1				d Entrance of a large or average sized center of activity on the east limb.				
	30	7768 (*) (*)	(25)	(-1)			114	16		Do.						
			-78	294	-7	78	48	2	F							
			-57	315	-35	62	12	1								
			-18	354	+21	28	6	1								
			+12	24	-17	20	24	6								
31	10 26	7768 (*) 7763 7767	+31	43	+31	43	48	12		Do.						
			(12)	(-1)			138	22								
			(358)	(-1)			115	23								

Mean daily area for 31 days=276

* Not numbered.

† Data from Mount Wilson charts.

VG=very good; G=good; F=fair; P=poor.



May 1945. M. W. R.

Chart I. Departure ($^{\circ}\text{F}$) of the Mean Temperature from the Normal, and Wind Roses for Selected Stations, May 1945

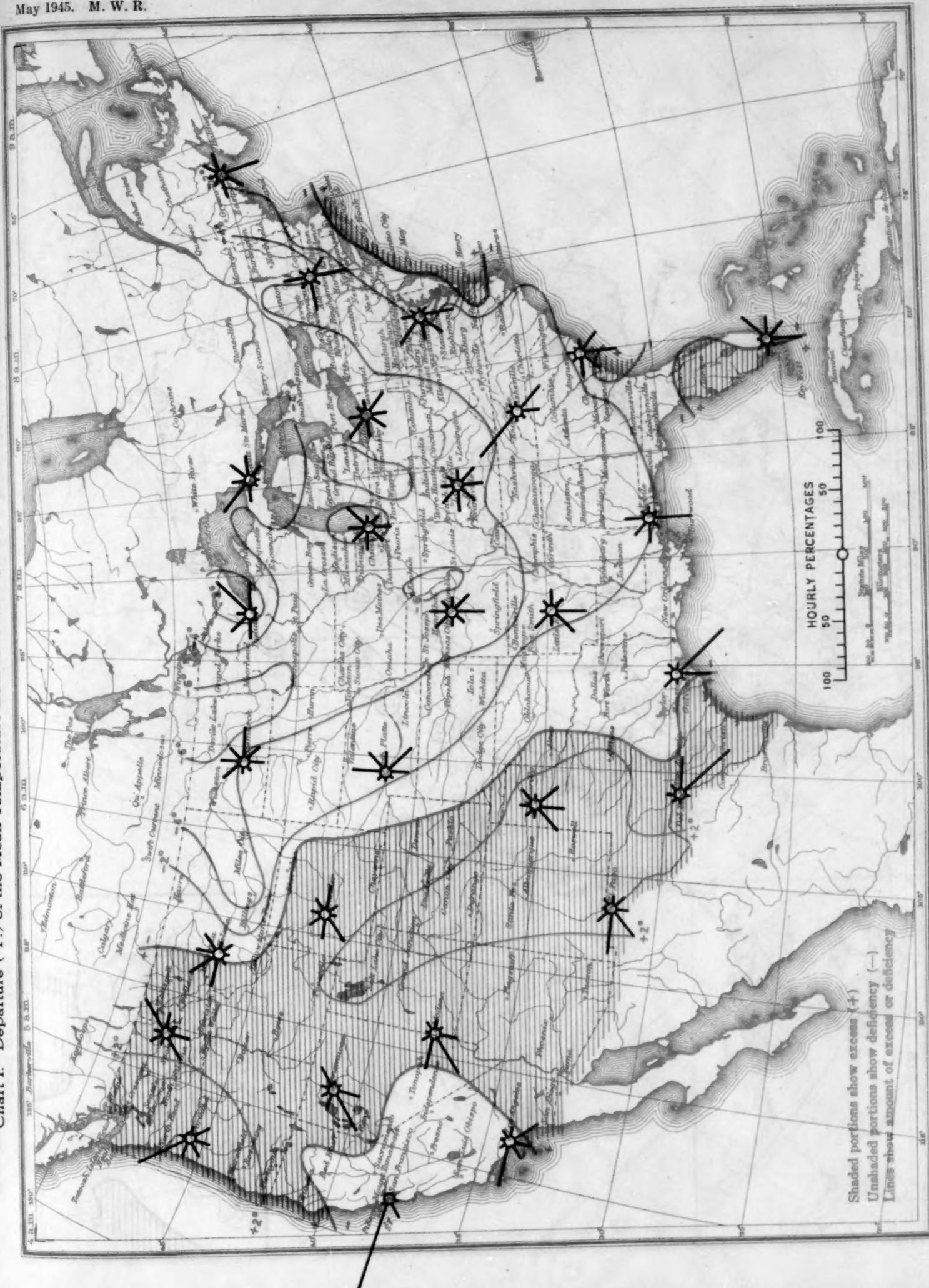
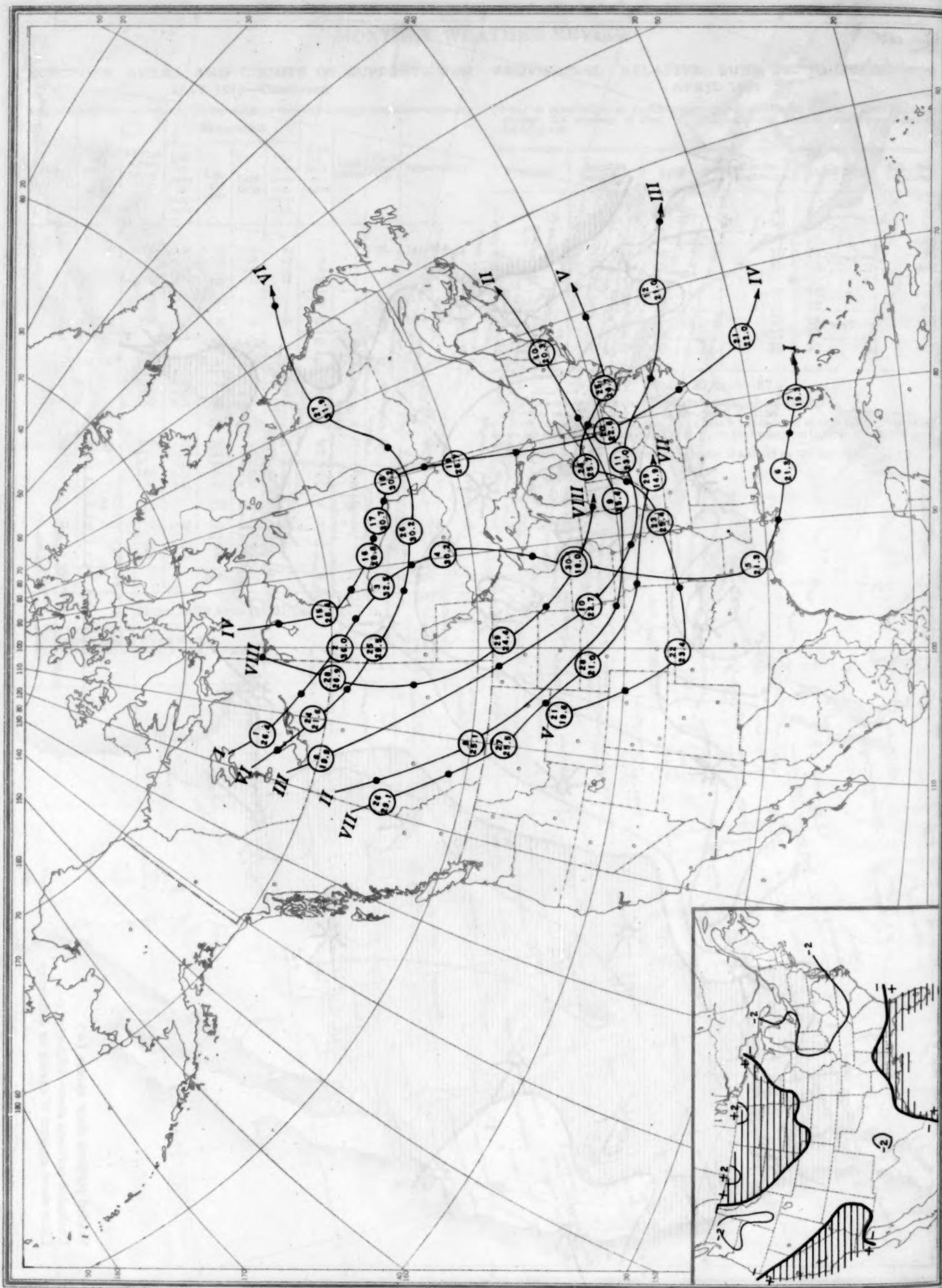


Chart II. Tracks of Centers of Anticyclones, May 1945. (Inset) Departure of Monthly Mean Pressure from Normal
(Plotted by D. R. Harris)



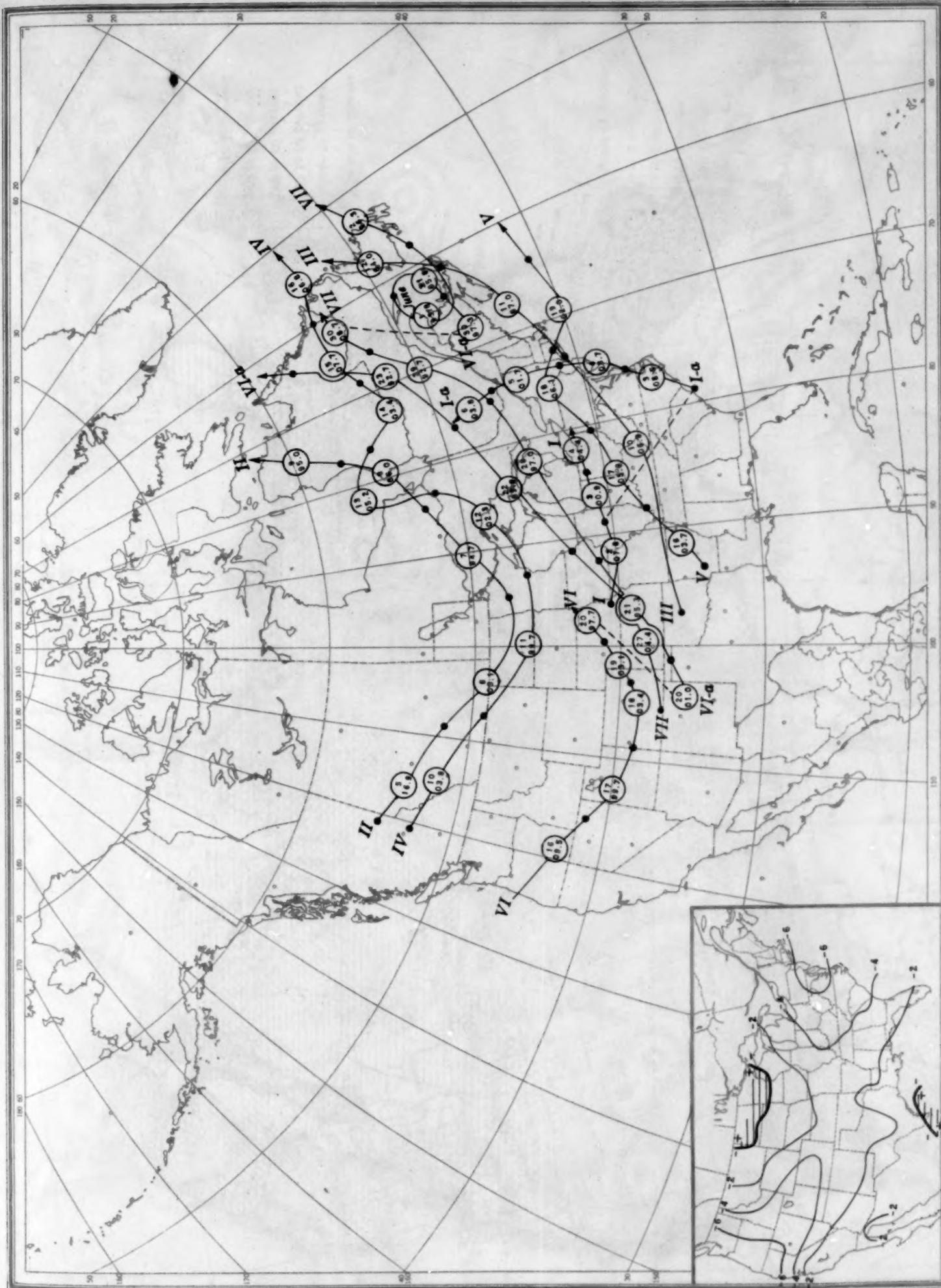
Circle indicates position of anticyclone at 7:30 a. m. (75° meridian time), with barometric reading. Dot indicates position of anticyclone at 7:30 p. m. (76° meridian time).

Chart III. Tracks of Centers of Cyclones, May 1945. (Inset) Change in Mean Pressure from Preceding Month

Circle indicates position of cyclone at 7:30 a. m. (76th meridian time), with barometric reading. Dot indicates position of anticyclone at 7:30 p. m. (76th meridian time).

Chart III. Tracks of Centers of Cyclones, May 1945. (Inset) Change in Mean Pressure from Preceding Month

(Plotted by D. R. Harris)



Circle indicates position of cyclone at 7:30 a. m. (76th meridian time), with barometric reading. Dot indicates position of cyclone at 7:30 p. m. (75th meridian time)

Chart IV. Percentage of Clear Sky Between Sunrise and Sunset, May 1945

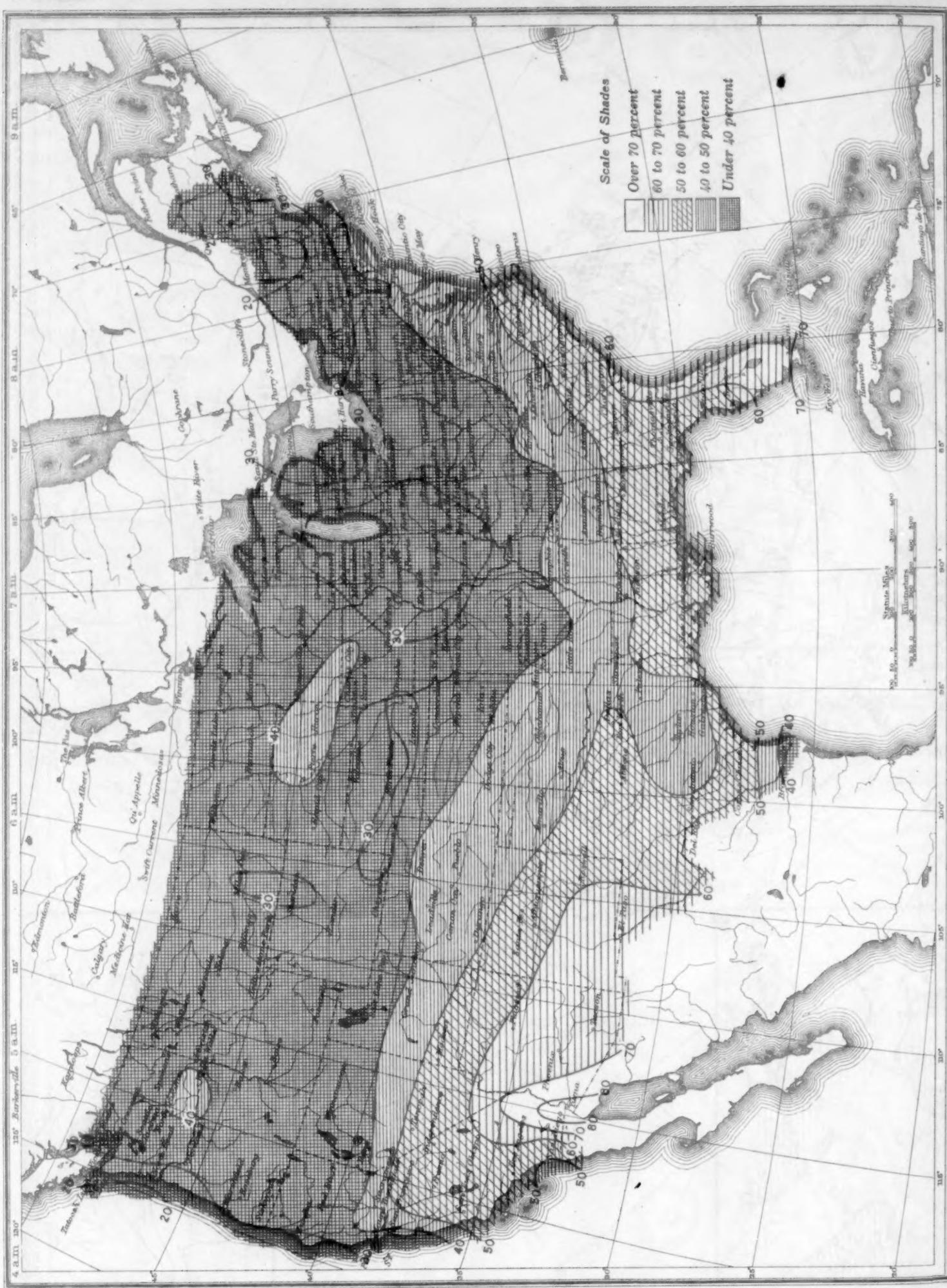


Chart V. Total Precipitation, Inches, May 1945. (Inset) Departure of Precipitation from Normal

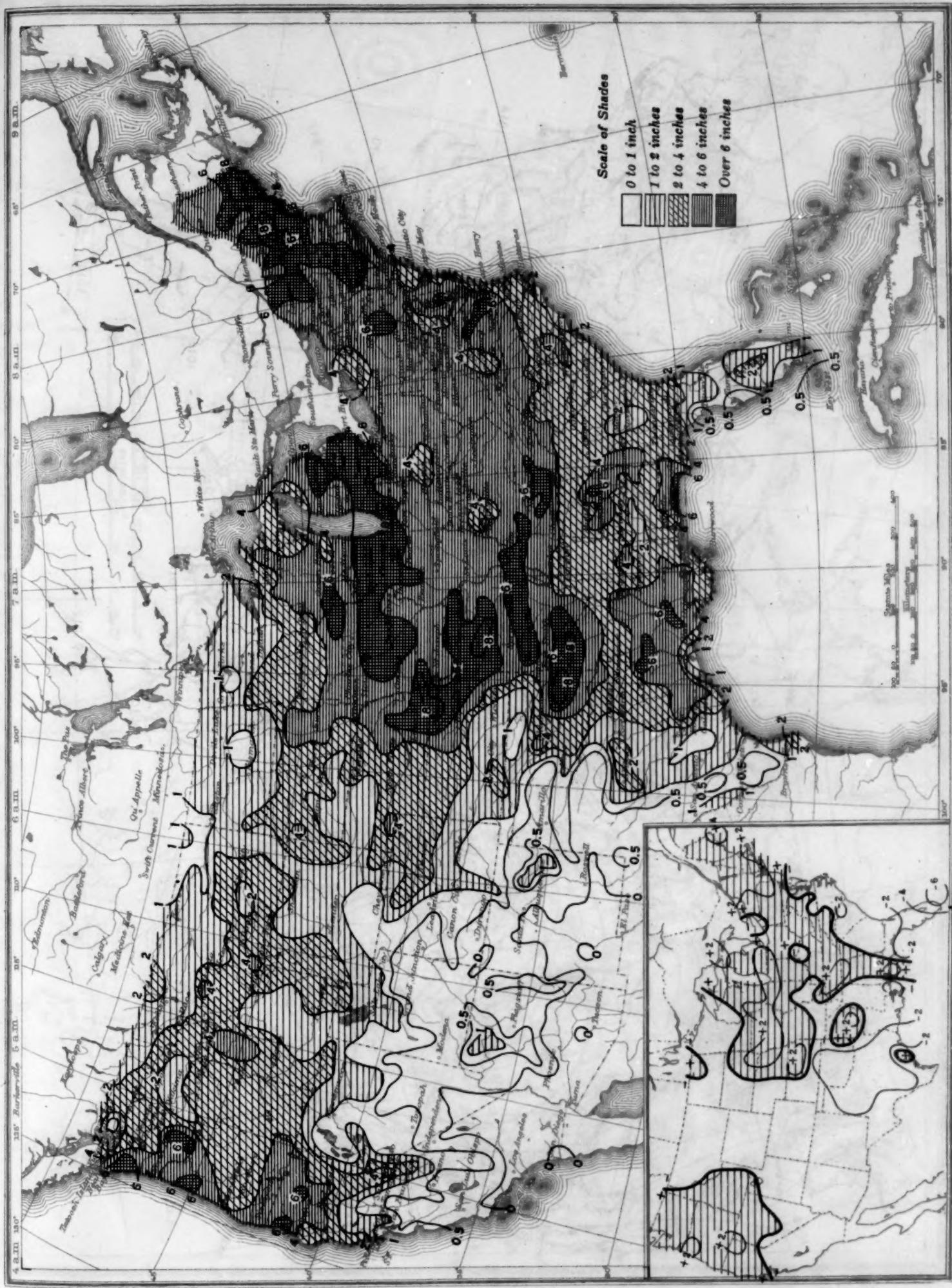


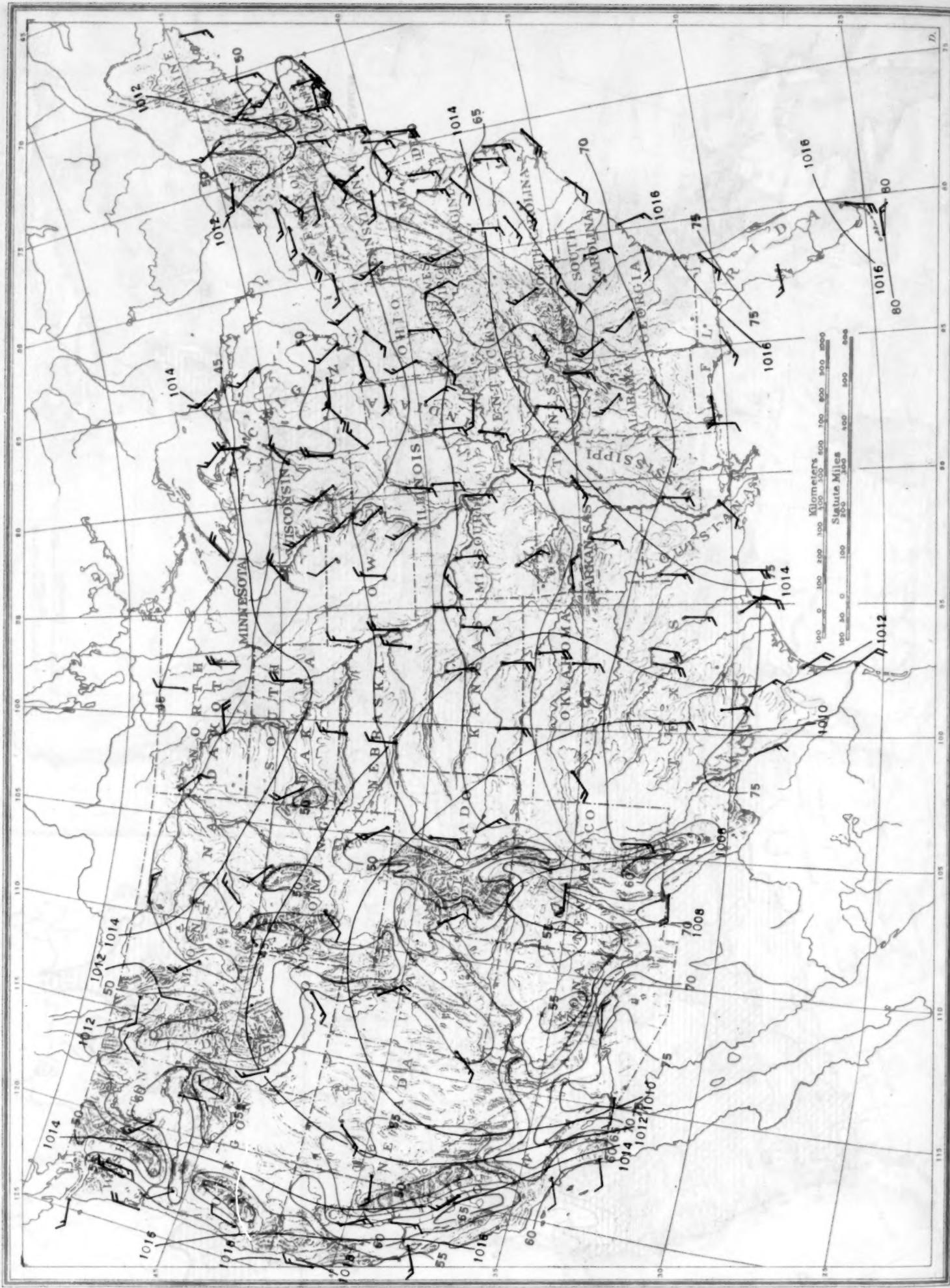
Chart VI. Isobars (mb), at Sea Level and Isotherms ($^{\circ}$ F.) at Surface; Prevailing Winds, May 1945

Chart VIII. Isobars (mb) for 1,524 Meters (5,000 ft.), and Resultant Winds for 1,500 Meters (m. s. l.) May 1945

Chart VIII. Isobars (mb) for 1,524 Meters (5,000 ft.), and Isotherms (°C.), and Resultant Winds for 1,500 Meters (m. s. l.) May 1945
 Isobars and isotherms based on radiosonde observations at 11:00 p. m. (E. S. T.) and winds based on pilot-balloon observations at 5:00 a. m. (E. S. T.).

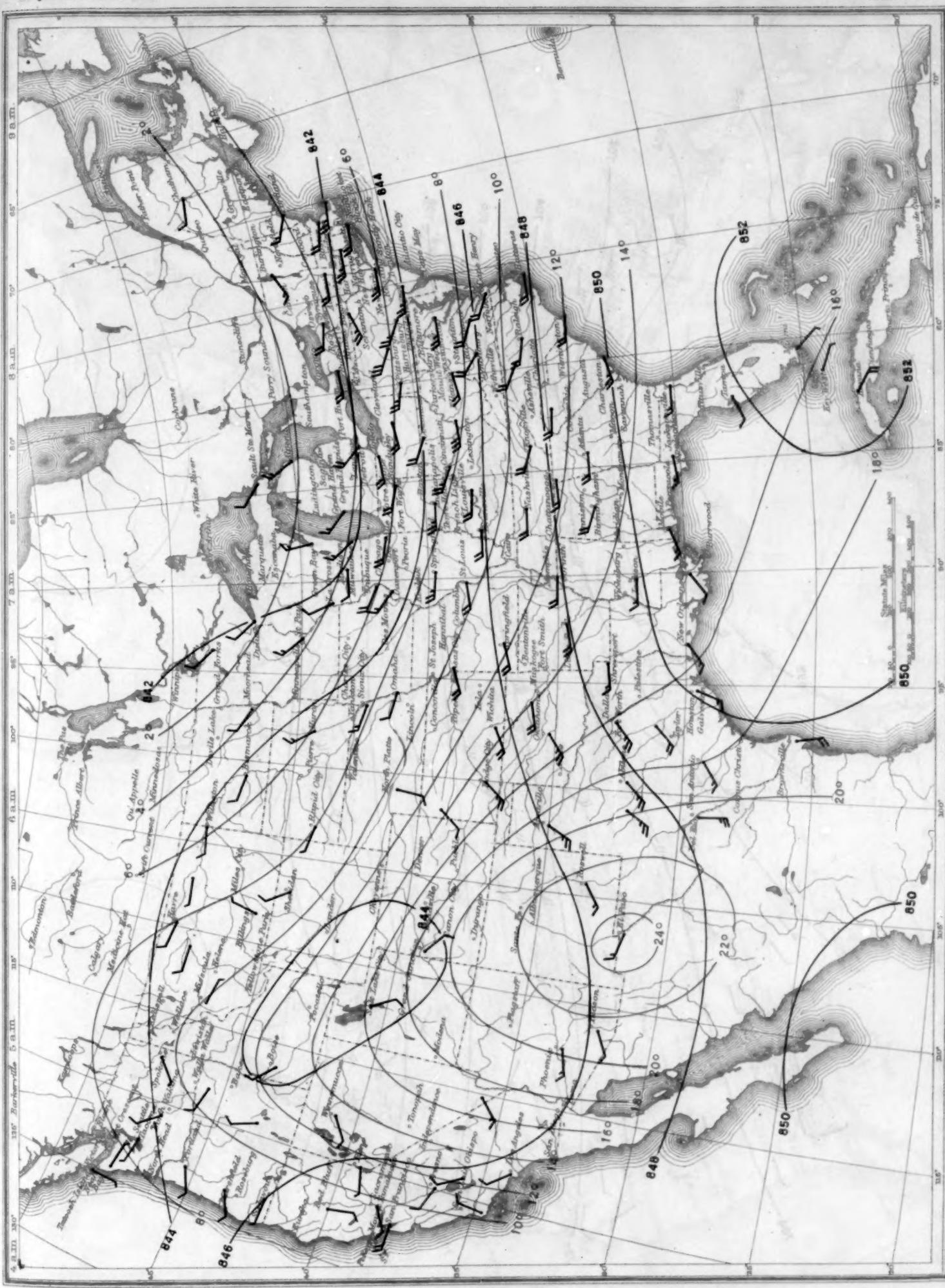


Chart IX. Isobars (mb), Isotherms (°C.), and Resultant Winds for 3,000 Meters (m. s. l.) May 1945

Isobars and isotherms based on radiosonde observations 11:00 p. m. at (E. S. T.) and winds based on pilot-balloon observations at 5:00 a. m. (E. S. T.).

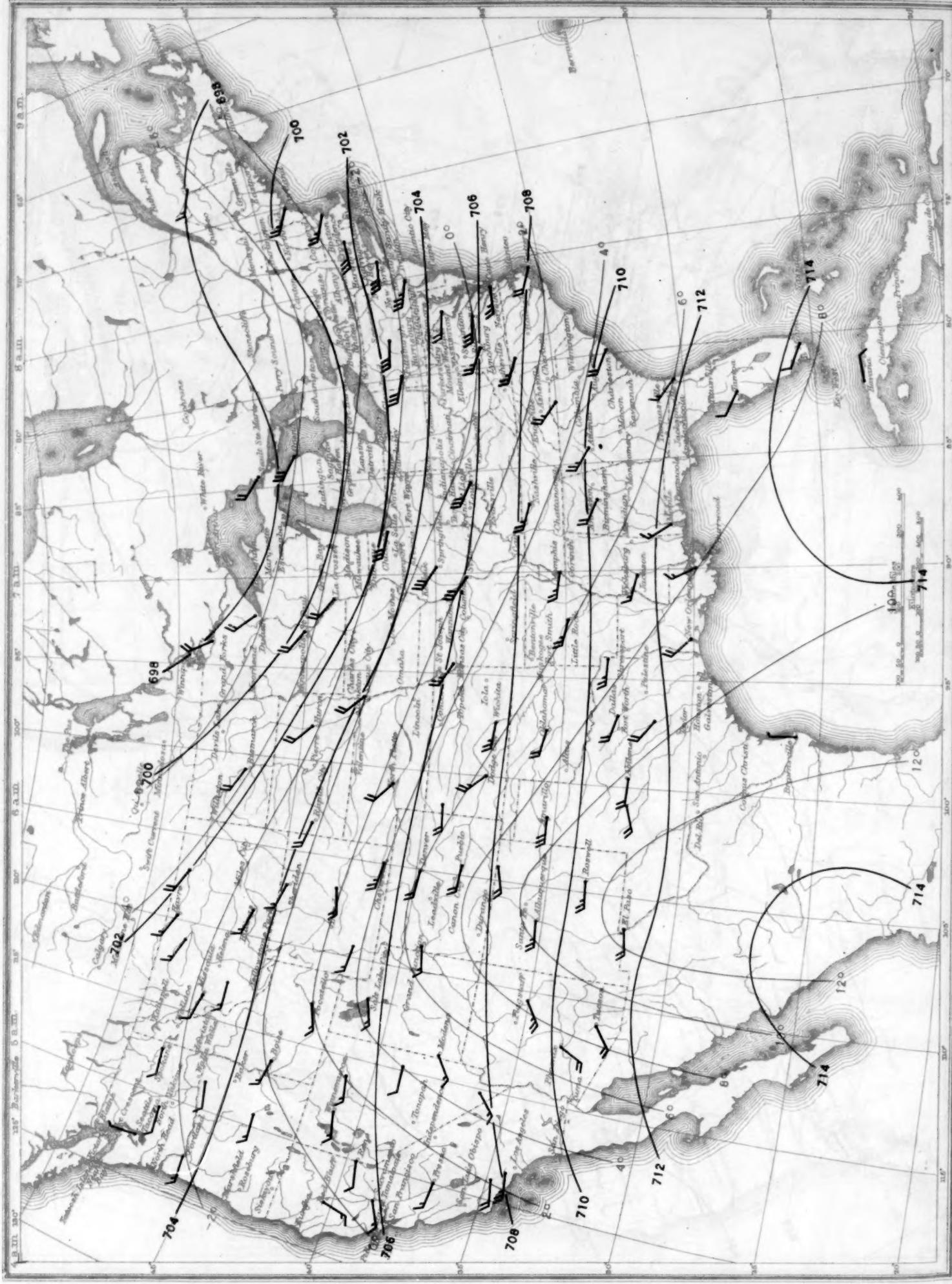


Chart X. Isobars (mb), Isotherms (°C.), and Resultant Winds for 5,000 Meters (m. s. l.) May 1945

Chart X. Isobars (mb), Isotherms ($^{\circ}\text{C}$), and Resultant Winds for 5,000 Meters (m. s. l.) May 1945
Isobars and isotherms based on radiosonde observations at 11:00 p. m. (E. S. T.) and winds based on pilot-balloon observations at 5:00 p. m. (E. S. T.)

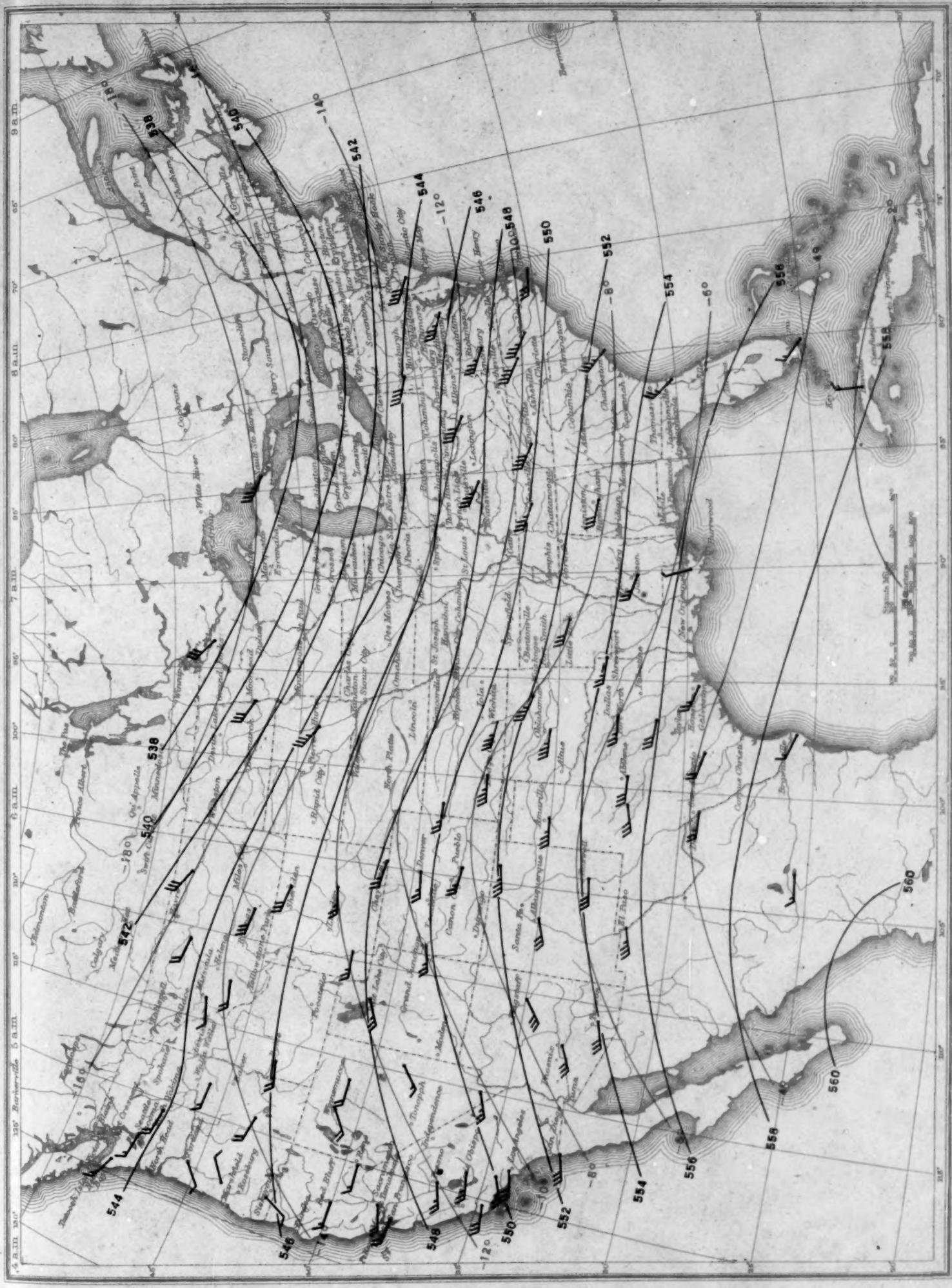


Chart XI. Isobars (mb), Isotherms ($^{\circ}\text{C}$), and Resultant Winds for 10,000 Meters (m. s. l.) May 1945
 Isocharts and isotherms based on radiosonde observations at 11:00 p. m. (E. S. T.) and winds based on pilot-balloon observations at 5:00 p. m. (E. S. T.).

